Copper (present as cuprous thiocyanate) and Its Associated End-use Products

Final Decision

7 August 2019
Re-evaluation Decision

Under the authority of the *Pest Control Products Act*, all registered pesticides must be regularly re-evaluated by Health Canada’s Pest Management Regulatory Agency (PMRA) to ensure that they continue to meet current health and environmental standards and continue to have value. The re-evaluation considers data and information from pesticide manufacturers, published scientific reports and other regulatory agencies. The PMRA applies internationally accepted risk assessment methods as well as current risk management approaches and policies.

Copper (present as cuprous thiocyanate; also known as copper thiocyanate) is used in antifouling paint applied to boats. It can be used on aluminum, fibreglass, wood, steel and lead hulls below the true waterline in fresh, salt and brackish water and can be applied using brush, roller, and/or spray equipment. It is registered for both commercial and domestic uses. Currently registered products containing copper thiocyanate are listed in Appendix I.

The regulatory approach for the re-evaluation of copper thiocyanate was first presented in the Proposed Re-evaluation Decision PRVD2018-18, *Copper (present as cuprous thiocyanate) and Its Associated End-use Products*,¹ which underwent a 90-day consultation period ending on 15 January 2019. PRVD2018-18 proposed that products containing copper thiocyanate are acceptable for continued registration in Canada, provided that required label updates are made to meet the current labelling standard.

No comments were received during the consultation period. Therefore, this decision is consistent with the proposed re-evaluation decision stated in PRVD2018-18, which lists all information used as the basis for the re-evaluation decision.

This document presents the final regulatory decision² for the re-evaluation of copper thiocyanate, including the label amendments required to bring labels to current standards. All products containing copper thiocyanate that are registered in Canada are subject to this re-evaluation decision.

Outcome of Science Evaluation

Antifouling paints based on copper thiocyanate have acceptable value in that they are the only ones registered in Canada for use on aluminum boats, and they provide protection against fouling organisms in fresh, salt, and brackish waters at a lower copper concentration than what is found in other copper-based antifouling paints.

With respect to human health, risks are found to be acceptable due to the low toxicity of copper thiocyanate and the low potential for exposure expected when the product is applied according to the label directions.

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¹ “Consultation statement” as required by subsection 28(2) of the *Pest Control Products Act*.

² “Decision statement” as required by subsection 28(5) of the *Pest Control Products Act*. 
Aquatic environments are expected to be exposed to copper leachates from boats treated with copper thiocyanate based paint. When used as directed, potential risk to the aquatic environment from copper thiocyanate based antifouling paints is found to be acceptable.

**Regulatory Decision for Copper thiocyanate**

Health Canada has completed the re-evaluation of copper thiocyanate. Under the authority of the *Pest Control Products Act*, Health Canada has determined that continued registration of products containing copper thiocyanate is acceptable. An evaluation of available scientific information found that uses of copper thiocyanate products meet current standards for protection of human health and the environment when used according to revised label directions. No additional data are requested.

**Risk Mitigation Measures**

Registered pesticide product labels include specific directions for use. Directions include risk mitigation measures to protect human health and the environment and must be followed by law. The updated label statements required as a result of the re-evaluation of copper thiocyanate are summarized below. Refer to Appendix II for details.

**Human Health**

- Label updates to meet current standards for antifouling paint use, in other words, additional label statements for toxicology, additional personal protective equipment and additional directions for use.

**Environment**

- Label updates to meet current standards for antifouling paint use, in other words, environmental hazards, storage, and disposal for both commercial and domestic end-use products.

**Next Steps**

To comply with this decision, the required mitigation measures must be implemented on all product labels sold by registrants no later than 24 months after the publication date of this decision document. Refer to Appendix I for details on specific products impacted by this decision.
Other Information

Any person may file a notice of objection\(^3\) regarding this decision on copper thiocyanate within 60 days from the date of publication of this Re-evaluation Decision. For more information regarding the basis for objecting (which must be based on scientific grounds), please refer to the Pesticides section of the Canada.ca website (Request a Reconsideration of Decision) or contact the PMRA’s Pest Management Information Service.

The relevant test data on which the decision is based (as referenced in PRD2018-18) are available for public inspection, upon application, in the PMRA’s Reading Room (located in Ottawa). For more information, please contact the PMRA’s Pest Management Information Service by phone (1-800-267-6315) or by e-mail (hc.pmra.info-arla.sc@canada.ca).

\(^3\) As per subsection 35(1) of the Pest Control Products Act
Appendix I  Registered Copper Thiocyanate Products in Canada

Table 1 Products Requiring Label Amendments

<table>
<thead>
<tr>
<th>Registration Number</th>
<th>Marketing Class</th>
<th>Registrant</th>
<th>Product Name</th>
<th>Formulation Type</th>
<th>Active ingredient (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25544</td>
<td>Domestic</td>
<td>International Paint LLC</td>
<td>Tri-Lux II Antifouling Series</td>
<td>Solution</td>
<td>11.88%</td>
</tr>
<tr>
<td>25545</td>
<td>Commercial</td>
<td>International Paint LLC</td>
<td>Tri-Lux II A/F Series</td>
<td>Suspension</td>
<td>11.88%</td>
</tr>
<tr>
<td>25546</td>
<td>Technical Active</td>
<td>Bardyke Chemicals Ltd.</td>
<td>Cuprous Thiocyanate Technical</td>
<td>Solid</td>
<td>52%</td>
</tr>
</tbody>
</table>

¹ as of 3 May 2019
Appendix II Label Amendments for Products Containing Copper thiocyanate

The label amendments presented below do not include all label requirements for individual end-use products, such as first aid statements, disposal statements, precautionary statements and supplementary protective equipment. Information on labels of currently registered products should not be removed unless it contradicts the label statements provided below.

For commercial end-use product

i) The following statements must be included in a section entitled TOXICOLOGY INFORMATION:

“Treat symptomatically.”

ii) The following statements must be included in a section entitled PRECAUTIONS:

“Wear a long-sleeved shirt, long pants, shoes and socks, chemical-resistant gloves, goggles, a chemical-resistant hat that covers the neck (for example, Sou’Wester) during mixing/loading, application, clean-up and repair, or when removing old antifouling paint coatings. In addition, wear a respirator with a NIOSH approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH approved canister approved for pesticides during application. Wear a NIOSH-approved N95 filtering facepiece respirator (dust mask) that is properly fit tested when removing old antifouling paint coatings.”

“Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.”

“Remove clothing/personal protective equipment immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.”

“Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product’s concentrate. Do not reuse them.”

“For cleaning/maintaining personal protective equipment, use detergent and hot water. Keep and wash personal protective equipment separately from other laundry.”

iii) The following statements must be included in a section entitled DIRECTIONS FOR USE:

“DO NOT apply this product in a way that will contact workers or bystanders, either directly or through drift. Only protected handlers may be in the treatment area during application.”
“DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.”

“DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), or estuarine/marine habitats.”

“DO NOT discharge effluent containing this product or the biocide produced into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters unless the effluent has been detoxified.”

“Prevent paint chips or dust caused by removing paint from entering water. DO NOT place the painted parts in water after painting until the paint is fully cured (see dry times on the label).”

iv) The following statements must be included in a section entitled ENVIRONMENTAL HAZARDS:

“Toxic to aquatic organisms.”

v) The following statement must be included in a section entitled STORAGE:

“To prevent contamination, store this product away from food or feed.”

For domestic end-use product

i) The following statements must be included in a section entitled TOXICOLOGY INFORMATION:

“Treat symptomatically.”

ii) The following statements must be included in a section entitled DIRECTIONS FOR USE:

“Prevent paint chips or dust caused by removing paint from entering water. DO NOT place the painted parts in water after painting until the paint is fully cured (see dry times on the label).”

iii) The following statement must be included in a section entitled ENVIRONMENTAL HAZARDS:

“Toxic to aquatic organisms.”

iv) The following statement must be included in a section entitled STORAGE:

“Prevent contamination. Store this product away from food or feed.”
v) The following statement must be included in a section entitled **DISPOSAL**:

“**DO NOT** reuse the empty containers. Dispose in household garbage. Unused or partially used products should be disposed at provincially or municipally designated hazardous waste disposal sites.”