



# Proposed Acceptability for Continuing Registration

**PACR2004-03**

## Re-evaluation of Polybutene

The purpose of this document is to inform the registrants, pesticide regulatory officials and the Canadian public that the Pest Management Regulatory Agency (PMRA) has completed a re-evaluation of polybutene. The PMRA has determined that polybutene is acceptable for continued registration, provided that the proposed mitigation measures are adopted and the data requirements are addressed.

This Proposed Acceptability for Continuing Registration (PACR) document provides a rationale for the proposed regulatory decision for polybutene. The PMRA will accept written comments on this proposal up to 45 days from the date of publication of this document. Please forward all comments to the Publications Coordinator at the address below.

*(publié aussi en français)*

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## 1.0 Background

The PMRA is re-evaluating all pesticides, both active ingredients and formulated end-use products, that were registered prior to 31 December 1994 to ensure that their continued acceptability is examined using current scientific approaches. Regulatory Directive DIR2001-03, *PMRA Re-evaluation Program*, presents the details of the re-evaluation activities and program structure.

Polybutene has been re-evaluated by the PMRA under Program 1 as described in DIR2001-03. Under this program, the PMRA relies as much as possible on foreign reviews, typically United States Environmental Protection Agency (USEPA) Re-registration Eligibility Decision (RED) documents, to assess Canadian pest control products. For products to be re-evaluated under Program 1, there must exist a suitable foreign review that meets the following conditions:

- it covers the main science areas that are necessary for Canadian regulatory decisions;
- it addresses the active ingredient itself and its main formulation types registered in Canada; and
- it is relevant to registered Canadian uses.

Based on the outcome of the USEPA review, the PMRA will propose, under Program 1, a regulatory decision and appropriate mitigation measures for Canadian uses of an active ingredient.

The USEPA conducted a re-evaluation of polybutene and concluded that it was eligible for re-registration with implementation of mitigation measures on the basis of a health and environmental risk assessment. The PMRA's conclusions on the polybutene re-evaluation were based on the RED document for polybutene, and taking into account Canadian use patterns and Canadian issues (e.g., the Canadian Toxic Substance Management Policy [TSMP]). A review of the chemistry of Canadian products was also conducted.

## 2.0 Re-evaluation of polybutene

Common name:	Polybutene
Chemical name:	Polymerized butenes
Chemical family:	Polybutenes
CAS registry number:	9003-29-6
OOP chemical codes:	011402
Molecular formula:	$R_3C-[C_4H_8]_n-CH=CR_2$ , where R represents $CH_3$

Polybutene was first registered in 1973. It is a non-drying, sticky polymer used as a repellent, primarily for repelling birds from terrestrial non-food areas, outdoor residential areas and indoor non-food areas. Canadian formulations registered as of 31 December 2003 include pastes and solutions and are listed in Appendix I.

Canadian registered use sites, pests, application rates, application methods and formulation types are also registered in the United States.

The RED for polybutene details the health and environmental risk assessments derived by the USEPA and is available from the Chemical Status List found on the Office of Pesticide Programs Web page ([www.epa.gov/pesticides/reregistration](http://www.epa.gov/pesticides/reregistration)).

The Canadian TSMP and DIR99-03 were taken into consideration during the re-evaluation of polybutene and it was determined that polybutene is not a TSMP Track 1 substance.

## 3.0 Proposed re-evaluation decision

The USEPA published a RED document for polybutene that addressed the main science areas required for Canadian regulatory decisions, i.e., human health and the environment. This document addressed polybutene uses that are also registered in Canada. Based on the USEPA RED and Canadian use patterns, the PMRA has determined that polybutene is acceptable for continued registration, provided that the mitigation measures specified below are adopted and that the data requirements outlined in this document are addressed. Acceptable uses of polybutene in Canada are listed in appendices II and III.

The PMRA will accept written comments on this proposal up to 45 days from the date of publication of this document to allow interested parties an opportunity to provide input into the proposed re-evaluation decision for these products.

## 4.0 Proposed regulatory action

Based on the findings of the USEPA and good hygiene practices, current polybutene labels should be modified to include the following statements to protect workers and small birds (for additional information, please refer to appendices II and III):

- For liquid formulation products only:  
“Wear long pants, long sleeves, chemical-resistant gloves and boots during mixing/loading and application. Wear a face shield during overhead application.”  
  
“Do not apply liquid products in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.”  
  
“For Exterior Use: For use on trees, bushes, shrubs, vines, etc., only in areas adjacent to buildings and away from areas of wildlife habitat (parklands, forested lands, etc.). It is not recommended for use on exterior surfaces of buildings or structures, since stain or residue will result.”
- For paste products:  
“Wear chemical-resistant gloves when handling.”
- For all polybutene products:  
“Small birds may become fatally entrapped by this tacky repellent. To reduce the hazards to legally protected species, follow all instructions in the Directions for Use.”

Label revisions must be submitted within 90 days of finalization of the re-evaluation decision.

## 5.0 Data requirements

The registrant is required to submit the following within 24 months of finalization of the re-evaluation decision:

- an application to register a technical source of polybutene with data pertaining to USC # 31 Data Code (DACO) 2 (chemistry requirements for the registration of a technical grade active ingredient [TGAI] or an integrated system product);
- all data (as they relate to Canadian use patterns) submitted to the USEPA in response to the United States data call-in prior to the United States re-registration, and USEPA Data Evaluation Reports; or science-based rationales to support submitted data waivers when appropriate;

- all data (as they relate to Canadian use pattern) that was required by the USEPA as a condition of re-registration of polybutene;
- a commitment and schedule to address Canadian requirements that are not addressed through submission of the data outlined above. These are outlined in the PMRA's DACO tables<sup>1</sup> for use-site category #31. The relevant sections of the DACO tables which registrants are required to address are as follows:

**USC # 31, Various indoor and outdoor sites—TGAI: DACOs 2 through 9, inclusive**

**USC # 31, Various indoor and outdoor sites—EP: DACOs 5 through 9, inclusive.**

The above, as well as additional data, may be required sooner if expansion of current uses of polybutene is requested.

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<sup>1</sup> Use-site category DACO tables can be located at the PMRA website at [www.hc-sc.gc.ca/pmra-arla/](http://www.hc-sc.gc.ca/pmra-arla/)

## Appendix I      Polybutene products currently registered in Canada (as of 31 December 2003)

Registrant	Registration Number	Guarantee	Product Name	Expiry Date	Formulation Type	Class
Nu-Gro IP Inc.	13868	86%	Wilson Shoo Bird Repellent Paste for Pigeons and Sparrows	2005	Paste	Domestic
The Tanglefoot Company	15825	97%	Tanglefoot Bird Repellent	2004	Paste	Domestic
J.T. Eaton & Co, Inc.	19033	80%	4 The Birds Transparent Bird Repellent	2004	Paste	Commercial
J.T. Eaton & Co, Inc.	20412	49%	TJ Eaton 4 The Birds Transparent Bird Repellent Liquid	2002	Solution	Commercial
Bird-X Inc.	20412.01	49%	Bird Prof Transparent Bird Repellent Liquid	2002	Solution	Commercial
Raydon Chemicals Inc.	22157	92.6%	Buzz Off Bird Repellent	2006	Paste	Commercial
Superior Chemicals Products Inc.	24488	88%	Super Hunter Repellent For Birds	2002	Paste	Domestic

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**Appendix II      Use standard for the commercial class products containing polybutene (as of 31 December 2003)**

**(NOTE:**      The information in this appendix summarizes the acceptable uses and precautions for the commercial class products containing polybutene, but does not identify all label requirements for such products. Registrants are referred to the *PMRA Registration Handbook* for further guidance on label requirements for pest control products.)

**COMMON NAME:**            Polybutene

**CHEMICAL NAME:**        (IUPAC): Polybut-1-ene  
                                      (CAS): Polymerized butenes

**FORMULATION TYPE:**    Solutions and pastes

**USE SITE CATEGORIES:** 31—Various indoor and outdoor sites

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**Personal protective equipment (PPE):**

For liquid formulation products only: Wear long pants, long sleeves, chemical-resistant gloves and boots during mixing/loading and application. Wear a face shield during overhead application. Do not apply liquid products in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For paste products: Wear chemical-resistant gloves when handling.

**Environmental precautions:**

Small birds may become fatally entrapped by this tacky repellent. To reduce hazards to legally protected species, follow all instructions in the Directions for Use.

For Exterior Use: For use on trees, bushes, shrubs, vines, etc., only in areas adjacent to buildings and away from areas of wildlife habitat (parklands, forested lands, etc.). It is not recommended for use on exterior surfaces of buildings or structures, since stain or residue will result.



**ACCEPTABLE USES FOR POLYBUTENE:**

SITE	PESTS	RATE	APPLICATION
<b>USE SITE CATEGORIES:</b> 31—Various indoor and outdoor sites			
<p>Liquid formulation can be used on trees, shrubs, vines, bushes and for interior use on beams, girders, struts, supports and other roosting sites.</p> <p>Paste formulation can be used on buildings and adjacent structures, window sills, eaves, ledges, roof lines, gutter edges and other roosting places.</p>	<p>Birds (including pigeons, sparrows, starlings, sea gulls [including ring billed, herring and California], and blackbirds [including brewers, cowbirds, grackles, and crows]).</p>	—	<p>Liquid formulation is used as a spray or brushed on surface with a paint brush.</p> <p>Paste formulation applied as a straight 10–12 mm bead, 2–3 cm from the edge with ready-to-use tube, caulking gun or putty knife. For wider areas, one or more beads applied in a zig-zag pattern.</p>

## Appendix III Use standard for the domestic class products containing polybutene (as of 31 December 2003)

**(NOTE:** The information in this appendix summarizes the acceptable uses and precautions for the domestic class products containing polybutene, but does not identify all label requirements for such products. Registrants are referred to the *PMRA Registration Handbook* for further guidance on label requirements for pest control products.)

**COMMON NAME:** Polybutene

**CHEMICAL NAME:** (IUPAC): Polybut-1-ene  
(CAS): Polymerized butenes

**FORMULATION TYPE:** Solutions and pastes

**USE SITE CATEGORIES:** 31—Various indoor and outdoor sites

### FOR DOMESTIC PRODUCTS

**Personal protective equipment (PPE):**

Wear chemical-resistant gloves when handling.

**Environmental precautions:**

Small birds may become fatally entrapped by this tacky repellent. To reduce hazards to legally protected species, follow all instructions in the Directions for Use.

**ACCEPTABLE USES FOR POLYBUTENE:**

SITE	PESTS	RATE	APPLICATION
<b>USE SITE CATEGORIES:</b> 31—Various indoor and outdoor sites			
Paste formulation can be used on buildings and adjacent structures, window sills, eaves, ledges, rooflines, gutter edges and other roosting places.	Birds including pigeons, sparrows and starlings	—	Paste formulation applied as a straight 10–12 mm bead with ready-to-use tube, caulking gun or putty knife.