



**UK National Level ESRA for Propyzamide**  
V1-0, May 2020

**Context and scope**

[FSC-POL-30-001 V3-0 EN FSC Pesticides Policy](#) requires you, as an FSC Forest Management certificate holder, to undertake a comparative environmental and social risk assessment (ESRA) as part of your integrated pest management to identify the lowest risk option to control a pest, weed or disease, the conditions for its use and the generic mitigation and monitoring measures to minimise the risks (FSC-POL-30-001 V3-0 EN clause 4.12.2). ESRAs are not intended for use in the field, but must inform your operational level planning (FSC-POL-30-001 V3-0 EN clause 4.12.6).

To help you comply with ESRA requirements, the Policy allows the national Standard Development Group to complete the ESRA template (FSC-POL-30-001 V3-0 EN page 24); you can then use this pre-populated template when undertaking your own ESRA. This national level ESRA for propyzamide has been produced on this basis, to support you in complying with the Policy. You are not obliged to rely on this guidance, nor are you obliged to use the FSC template for ESRAs; you may use your own template for risk assessments, provided you cover all of the content requirements of the Policy.

FSC has not classified propyzamide as a Highly Hazardous Pesticide (HHP). As such it falls under the category of 'other chemical pesticides'.

This ESRA covers standard forestry uses of propyzamide for grass control.

The full ESRA, setting out a range of environmental and social values, the potential risks to those values from propyzamide usage, and the strategies to minimise those risks, is provided for context on pages 6-17. The essential controls on propyzamide usage are summarised overleaf.

The controls in this ESRA are for guidance only, although they will be considered by auditors when assessing your compliance with the Policy requirements.

## Controls

The following are the essential controls identified in the national level ESRA. They include new controls (**Pyz.x**), but also existing controls in UKWAS (**UKWAS x.x.x**). Your own management unit level ESRA should incorporate these controls, but you may also identify other controls applicable to your specific circumstances. You must incorporate controls in your site level operational plans as appropriate, adapting them where necessary to site-specific risks (FSC-POL-30-001 V3-0 EN clause 4.12.6).

### General strategies

**Pyz.1** Operations conform to FISA Safety Guide 202 *Application of pesticides by hand-held equipment*.

*Guidance note: Owners/managers may also find it useful to refer to Pesticides: Code of practice for using plant protection products in England and Wales, Pesticides: Code of practice for using plant protection products in Scotland, or Pesticides: Code of practice for using plant protection products in Northern Ireland.*

**Pyz.2** Operators hold NPTC PA1 and PA6 certificates of competence or LANTRA equivalents.

**Pyz.3** There is an appropriate COSHH assessment.

**Pyz.4** Operators comply with the requirements and relevant recommendations of the product label.

**Pyz.5** Records of propyzamide usage are maintained, including trade name, active ingredient, quantity of active ingredient used, period of use, number and frequency of applications, location and area of use, and reason for use. These records are kept for a minimum of five years.

**UKWAS 3.4.1(b)** The use of pesticides, biological control agents and fertilisers shall be minimised.

**UKWAS 3.4.3** Where pesticides and biological control agents are to be used:

- The owner/manager and workers shall be aware of and implement legal requirements and non-legislative guidance for use of pesticides and biological control agents in forestry
- The owner/manager shall keep records of pesticide usage and biological control agents as required by current legislation.

## Soil

**UKWAS 3.1.2** The planning of woodland operations shall include:

- Taking measures to protect water resources and soils, and prevent disturbance of and damage to priority species, habitats, ecosystems and landscape values, including adapting standard prescriptions where required. Any disturbance or damage which does occur shall be mitigated and/or repaired, and steps shall be taken to avoid recurrence.

**UKWAS 4.5.1(a)** Areas and features of critical importance for watershed management or erosion control shall be identified in consultation with relevant statutory bodies.

**UKWAS 4.5.1(b)** Where critically important areas or features are identified, their management shall be agreed with the relevant statutory bodies.

## Water

**Pyz.6** Operations conform to *UK Forestry Standard* requirements and guidelines in relation to buffer zones around watercourses, waterbodies and abstraction points. There is no usage, mixing or filling of propyzamide within 10 m of permanent watercourses with a channel <2 m wide, within 20 m of wider watercourses or lakes, reservoirs, large ponds or wetlands, or within 50 m of abstraction points for public or private water supplies, such as springs, boreholes, wells or surface water intakes.

*Guidance note: This control is based on the recommended buffer widths in table 6.7.2 of UKFS. Also particularly relevant are UKFS good forestry practice requirement 8 for Forests and Water, and guidelines 62, 67 and 69 for Forests and Water. See also Forestry Commission Practice Guide 25 Managing forest operations to protect the water environment.*

**Pyz.7** Propyzamide is not applied on frozen or waterlogged ground.

**Pyz.8** Impacts on water quality are monitored using data collected by drinking water inspectorates and/or statutory environment protection agencies.

*Guidance note: Pesticides in water are known to be monitored by the [Drinking Water Inspectorate](#) in England and Wales, the [Drinking Water Inspectorate for Northern Ireland](#), and the [Drinking Water Quality Regulator for Scotland](#). Further relevant monitoring information may be available from the statutory environment protection agencies.*

*It is not expected that owners/managers will have the resources to collect data of the quality collected by statutory authorities, and owners/managers should rely on official data whenever possible. Owners/managers should collect their own data in response to significant incidents (e.g. spillage of pesticide etc.) where contamination of water supplies or environmental damage is likely to have occurred, in order that any damage can be assessed, and mitigated and/or repaired.*

**UKWAS 3.7.2** Plans and equipment shall be in place to deal with accidental spillages of fuels, oils, fertilisers or other chemicals.

**UKWAS 5.1.1(b)** A precautionary approach shall be adopted in relation to water supplies.

High Conservation Values (particularly HCV 1-4)

**Pyz.9** Propyzamide is not applied on Sites of Special Scientific Interest, Areas of Special Scientific Interest, ancient woodland sites or priority habitats where rare grasses or sedges may be present.

**UKWAS 2.2.1** All areas in the WMU shall be covered by management planning documentation which shall be retained for at least ten years and shall incorporate:

- c) Assessment of environmental values, including those outside the WMU potentially affected by management, sufficient to determine appropriate conservation measures and to provide a baseline for detecting possible negative impacts.
- d) Identification of special characteristics and sensitivities of the woodland and appropriate treatments.
- e) Specific measures to maintain and where possible enhance those areas identified under sections 4.1–4.5 and 4.8, considering areas where either the extent of these areas or their sensitivity to operations may be unknown.

**UKWAS 4.1.1(a)** Areas and features of high conservation value having particular significance for biodiversity shall be identified by reference to statutory designations at national or regional level and/or through assessment on the ground.

**UKWAS 4.2.1(a)** Ancient semi-natural woodland shall be identified by reference to published maps and/or by assessment on the ground.

**UKWAS 4.3.1(a)** The owner/manager shall maintain and enhance or restore features and areas of high conservation value within plantations on ancient woodland sites.



### High Conservation Values (especially HCV 5-6)

**UKWAS 2.3.1(a)** Local people, relevant organisations and interested parties shall be identified and made aware that:

- New or revised management planning documentation, as specified under section 2.2.1, is being produced
- High impact operations are planned
- The woodland is being evaluated for certification.

**UKWAS 2.3.1(c)** The owner/manager shall consult appropriately with local people, relevant organisations and other interested parties, and provide opportunities for their engagement in planning and monitoring processes.

### Health and welfare

**Pyz.10** Operators have and use adequate personal protective equipment as specified on the product label and in the COSHH assessment.

**Pyz.11** Operator exposure to propyzamide is monitored using pesticide application records and site checks of use of personal protective equipment. There is appropriate follow up action if personal protective equipment is not being used.

**Pyz.12** Operator health concerns are monitored using pesticide application records and site checks. There is appropriate follow up action if health concerns are identified.

### Rights

**Pyz.13** Where it is desirable to restrict public access to minimise health and safety risks, such restrictions are kept to the minimum extent and duration necessary to achieve their aims.

*See also UKWAS 2.3.1(c) under High Conservation Values, above.*

## Environmental and social risk assessment

Pesticide: Propyzamide

Purpose of use: Grass control

This ESRA is based on the status of propyzamide as a non-Highly Hazardous Pesticide, and the proposed mitigation strategies and indicators are proportionate to the perceived level of risk.

It applies to propyzamide itself and not to individual formulations, which may present other hazards.

It applies solely to standard forestry uses of propyzamide, i.e. those covered by the certificates of competence mentioned in the ESRA. It does not apply to non-standard uses, which may require additional safeguards.

It applies not only to application of propyzamide, but also to mixing, storage and waste disposal, all of which are covered by the best practice guidance cited in the proposed mitigation strategies and indicators.

The ESRA includes references to:

- [The UK Woodland Assurance Standard](#) (UKWAS), with cross-references to [FSC-STD-GBR-03-2017 V1-0 EN UK all forest types and scales](#) (the official FSC version of the standard).
- [The UK Forestry Standard](#) (UKFS), the governments' approach to sustainable forestry.
- [Forestry Commission Practice Guide 15 Reducing Pesticide Use in Forestry](#) (FCPG015).
- Forestry Commission Practice Guide 25 [Managing forest operations to protect the water environment](#) (FCPG025).
- [FISA Safety Guide 202 Application of pesticides by hand-held equipment](#) (FISA202).
- [Pesticides: Code of practice for using plant protection products](#), for England and Wales.
- [Pesticides: Code of practice for using plant protection products in Scotland](#).
- [Pesticides: Code of practice for using plant protection products](#), for Northern Ireland.

Exposure Elements	Minimum list of values	Description of why/why not a risk	Mitigation strategies defined to minimize risk	Controls
			<p><b>Overview</b>  From the descriptions of risk, the principal issues are the potential for the contamination of water (and associated risks, including to aquatic life), and worker safety. Mitigation strategies are focussed on these key risks, but also address the other, lesser risks identified: the potential for soil erosion, effects on rare grasses and sedges, worker welfare, effects on water-based and agricultural enterprises, and effects on public access.</p> <p><b>General strategies</b>  While this ESRA comes at a point in the IPM process where it has already been decided that the use of propyzamide is necessary, most of the risks described can be mitigated to some degree by minimising the volume used, both in terms of the total used on a site and the amount applied in individual spots and strips. For this reason, the overarching UKWAS requirement to minimise pesticide use (UKWAS 3.4.1(b) [FSC 10.7.2) is a key general mitigation strategy. This is monitored via UKWAS 3.4.3 [FSC 10.7.8].</p> <p>Mitigation of risks to water and worker safety can be achieved largely through conformance to FISA Safety Guide 202 <i>Application of pesticides by hand-held equipment</i>, which addresses the following issues:</p> <ul style="list-style-type: none"> <li>• Certificates of competence,</li> <li>• Personal protective equipment (PPE) and hygiene requirements,</li> <li>• The applicator,</li> <li>• Emergency procedures,</li> <li>• Planning to spray,</li> <li>• Preparing to spray,</li> <li>• Spraying,</li> <li>• After spraying, and</li> <li>• Weather conditions.</li> </ul>	<p><i>Note: Most of the mitigation strategies are implemented by requiring conformance to FISA202 as per control Pyz.1. Additional controls are used to emphasise specific issues covered by FISA202, such as training (control Pyz.2), or to address issues covered more adequately elsewhere, such as buffer zones in UKFS (control Pyz.6). Other controls are included to address particular FSC requirements in relation to monitoring (controls Pyz.8 and 11) and research (controls Pyz.4-5).</i></p> <p><b>Pyz.1</b> Operations conform to FISA Safety Guide 202 <i>Application of pesticides by hand-held equipment</i>.</p> <p><i>Guidance note: Owners/managers may also find it useful to refer to Pesticides: Code of practice for using plant protection products in England and Wales, Pesticides: Code of practice for using plant protection products in Scotland, or Pesticides: Code of practice for using plant protection products in Northern Ireland.</i></p>

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			<p>Checking conformance with FISA202 ensures adherence to the COSHH assessment (i.e. an assessment carried out in accordance with the Control of Substances Hazardous to Health Regulations 2002); the use of a suitable, properly maintained and calibrated applicator; appropriate emergency planning and safety signage; safe transport and storage; and appropriate waste disposal. Most of this will be achieved through suitable contracts and supervision.</p> <p>All risks are mitigated to some degree by appropriate operator training, as evidenced by certificates of competence. All operators working with glyphosate should hold the National Proficiency Tests Council (NPTC) or Scottish Skills Testing Service (SSTS) certificates PA1 (Foundation module) and PA6 (Hand-held applicators) or LANTRA equivalents.</p> <p>PA1 leads to the following outcomes:</p> <ul style="list-style-type: none"> <li>• Outcome 1. Know the legislative requirements and codes of practice relating to the use of pesticides</li> <li>• Outcome 2. Understand the relevance of product information</li> <li>• Outcome 3. Know how to minimise the risk of human contamination and implement emergency procedures</li> <li>• Outcome 4. Know how to store and transport pesticides safely</li> <li>• Outcome 5. Know how to manage and dispose of surplus pesticide and waste materials</li> <li>• Outcome 6. Know the record keeping requirements</li> <li>• Outcome 7. Know how to minimise the risk of environmental contamination and implement emergency procedures</li> </ul> <p>PA6 leads to the following outcomes:</p>	<p><b>Pyz.2</b> Operators hold NPTC PA1 and PA6 certificates of competence or LANTRA equivalents.</p> <p><b>Pyz.3</b> There is an appropriate COSHH assessment.</p> <p><b>Pyz.4</b> Operators comply with the requirements and relevant recommendations of the product label.</p> <p><b>Pyz.5</b> Records of propyzamide usage are maintained, including trade name, active ingredient, quantity of active ingredient used, period of use, number and frequency of applications, location and area of use, and reason for use. These records are kept for a minimum of five years.</p> <p><i>See also UKWAS 3.4.1(b) and 3.4.3 [FSC 10.7.2 and 10.7.8 respectively].</i></p>



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			<ul style="list-style-type: none"> <li>• Outcome 1. Know the legislative and safety regulations relating to applicator use</li> <li>• Outcome 2. Be able to assess the environmental factors relating to mixing and application</li> <li>• Outcome 3. Be able to read and interpret product information</li> <li>• Outcome 4. Be able to prepare and calibrate a hand held pedestrian applicator</li> <li>• Outcome 5. Be able to operate the application equipment</li> <li>• Outcome 6. Know how to carry out post-operational procedures</li> </ul> <p>All risks are mitigated to some extent by complying with the product label.</p>	
<b>Environmental</b>	Soil (erosion, degradation, biota, carbon storage)	<p>Control of vegetation using propyzamide may create bare soil, which <b>may potentially lead to soil erosion or degradation.</b></p> <p>Standard forestry usage of propyzamide is <b>not</b> known to have significant impacts on soil biota or carbon storage.</p>	The risk of soil erosion or degradation is considered to be relatively minor, and adequately addressed by UKWAS 3.1.2, 4.51(a) and 4.5.1(b) [FSC 10.10.2, 9.1.6 and 9.3.7 respectively].	See UKWAS 3.1.2, 4.5.1(a) and 4.5.1(b) [FSC 10.10.2, 9.1.6 and 9.3.7 respectively].
	Water (ground water, surface waters, water supplies)	Propyzamide is known to be <b>very toxic to aquatic life</b> (CLP H400) and <b>very toxic to aquatic life</b>	Water protection is addressed explicitly in paragraphs 20, 26 and 33 of FISA202, but also throughout the guide. While a wide range of measures, including careful transport and storage, are important in protecting water resources, the principal measure to protect surface waters and water	<b>Pyz.6</b> Operations conform to <i>UK Forestry Standard</i> requirements and guidelines in relation to buffer zones around watercourses, waterbodies and abstraction

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		<p><b>with long lasting effects</b> (CLP H410).</p> <p>Propyzamide usage has the <b>potential to contaminate ground water, surface water and water supplies.</b></p> <p>The greatest risk of harm comes from mixing and filling undiluted products.</p>	<p>supplies is to identify them and to respect appropriate buffer zones around them, as per paragraph 20:</p> <p>20 Check the precise location of any domestic water supply, rivers, streams, ditches or ponds. Plan to leave a suitable buffer strip (see product label) to avoid contamination.</p> <p>Propyzamide product labels do not specify buffer widths, but various minimum distances between operations and surface water etc. are set out in the <i>UK Forestry Standard</i> Guidelines on Forests and Water 62, 67 and 69:</p> <p>62 The preparation of pesticide for application and the filling, cleaning or maintenance of pesticide sprayers shall be undertaken in conditions such that any spillage, run-off or washings will be prevented from entering any surface water or wetland; these activities shall not be undertaken within 10 m of any surface water or wetland, or any opening into a surface water drainage system.</p> <p>67 No pesticide shall be applied in, onto or over ground, or allowed to drift onto or over ground that is within 1 m of any surface water or wetland; is within 50 m of any spring, well or borehole; is frozen, waterlogged or covered with snow (except where the application in, onto or over waterlogged ground is necessary to control fungal disease and all precautions are taken to minimise the risk of contamination of any surface water or wetland); is sloping (unless it is ensured that any run-off of pesticide will be intercepted by a sufficient buffer zone); has an impermeable surface which drains directly into a surface water drainage system (unless measures are taken to minimise this risk); or is along roads, railway lines, permeable surfaces or other infrastructure (unless</p>	<p>points. There is no usage, mixing or filling of propyzamide within 10 m of permanent watercourses with a channel &lt;2 m wide, within 20 m of wider watercourses or lakes, reservoirs, large ponds or wetlands, or within 50 m of abstraction points for public or private water supplies, such as springs, boreholes, wells or surface water intakes.</p> <p><i>Guidance note: This control is based on the recommended buffer widths in table 6.7.2 of UKFS. Also particularly relevant are UKFS good forestry practice requirement 8 for Forests and Water, and guidelines 62, 67 and 69 for Forests and Water. See also Forestry Commission Practice Guide 25 Managing forest operations to protect the water environment.</i></p> <p><b>Pyz.7</b> Propyzamide is not applied on frozen or waterlogged ground.</p> <p><b>Pyz.8</b> Impacts on water quality are monitored using data collected by drinking water inspectorates and/or</p>

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			<p>measures are taken to minimise the risk of pollution of any surface water or wetland).</p> <p>69 No pesticide, including any used packaging that has been stored in contact with pesticide, shall be stored on land that is within 10 m of any surface water or wetland, or 50 m of any spring, well or borehole; or on an impermeable surface draining to a surface water drainage system.</p> <p>Risks can be reduced by going beyond these minimum requirements and observing the recommended buffer widths in table 6.7.2 of UKFS.</p> <p>It is important not to apply propyzamide on frozen or waterlogged ground, to avoid the risk of runoff into adjacent surface water.</p> <p>Special care is required when mixing, filling and diluting pesticide concentrates ready for application. In forestry, pesticides are usually mixed on or near to the treatment site, so it is extremely important to choose the mixing area carefully, make sure it is outside aquatic buffer zones, and take precautions to avoid contaminating the wider environment.</p> <p>FISA202 also requires that safe areas be identified for diluting and mixing pesticides and for filling applicators, and that appropriate arrangements are in place to deal with spillages (paragraph 24).</p> <p>UKWAS 3.7.2 [FSC 6.3.3] requires that plans and equipment must be in place to deal with accidental spillages of chemicals.</p>	<p>statutory environment protection agencies.</p> <p><i>Guidance note: Pesticides in water are known to be monitored by the <a href="#">Drinking Water Inspectorate</a> in England and Wales, the <a href="#">Drinking Water Inspectorate for Northern Ireland</a>, and the <a href="#">Drinking Water Quality Regulator for Scotland</a>. Further relevant monitoring information may be available from the statutory environment protection agencies.</i></p> <p><i>It is not expected that owners/managers will have the resources to collect data of the quality collected by statutory authorities, and owners/managers should rely on official data whenever possible. Owners/managers should collect their own data in response to significant incidents (e.g. spillage of pesticide etc.) where contamination of water supplies or environmental damage is likely to have occurred, in order that any damage can be assessed, and mitigated and/or repaired.</i></p>

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			In addition, UKWAS 5.1.1(b) [FSC 9.3.9] requires that a precautionary approach be adopted in relation to water supplies.	<i>See also UKWAS 3.7.2 and 5.1.1(b) [FSC 6.3.3 and 9.3.9 respectively].</i>
	Atmosphere (air quality, greenhouse gasses)	Standard forestry usage of propyzamide is <b>not</b> considered to have any significant impacts.	N/A	N/A
	Non-target species (vegetation, wildlife, bees and other pollinators, pets)	<p>As propyzamide is selective and applied in winter, standard forestry usage is <b>not</b> considered to have any significant impacts on non-target vegetation.</p> <p>Standard forestry usage of propyzamide is <b>not</b> considered to present a hazard to wildlife, bees and other pollinators, or pets.</p>	N/A	N/A
	Non-timber forest products (as FSC-STD-01-001 V5-2 FSC Principles and Criteria, criterion 5.1)	As propyzamide is selective and applied in winter, standard forestry usage is <b>not</b> considered to have any significant impacts on non-timber forest products.	N/A	N/A

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	High Conservation Values (particularly HCV 1-4)	<p>There are <b>potential impacts on rare grasses and sedges in semi-natural grasslands and woodlands (potentially HCV 1 and 3) and on soil erosion (HCV 4).</b></p> <p>HCV 2 is <b>not</b> considered to be present in the UK.</p>	<p>In the UK context, HCV 1 (concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels) is taken to be represented by biological Sites of Special Scientific Interest (SSSIs, in England, Scotland and Wales) and Areas of Special Scientific Interest (ASSIs, in Northern Ireland). HCV 3 (rare, threatened, or endangered ecosystems, habitats or refugia) is taken to be represented by SSSIs/ASSIs, ancient woodland sites and priority habitats. For more information, see the <i>National High Conservation Value Framework for the United Kingdom</i>, available at <a href="https://www.fsc-uk.org/en-uk/business-area/fsc-certificate-types/forest-management-fm-certification/forest-certification">https://www.fsc-uk.org/en-uk/business-area/fsc-certificate-types/forest-management-fm-certification/forest-certification</a>.</p> <p>If a SSSI or ASSI is designated in whole or in part because of grasses or sedges, or if grasses or sedges form an important feature of an ancient woodland site or priority habitat, use of propyzamide could potentially threaten the High Conservation Value.</p> <p>The <i>National HCV Framework</i> includes sources of mapping information for identifying SSSIs and ASSIs. Maps will often provide direct links to site descriptions, including the reasons for designation and lists of operations likely to damage the special interest (and which, within the boundary of the site, require the consent of the relevant statutory nature conservation body). The <i>Framework</i> also includes sources of mapping information for identifying ancient woodland sites. Priority habitats must be identified by field survey.</p> <p>UKWAS requirements 2.2.1(c) [FSC 7.2.1.3], 2.2.1(d) [FSC 7.2.1.4] and, in particular, 2.2.1(e) [FSC 7.2.1.5], 4.1.1(a) [FSC 9.1.1] 4.2.1(a) [FSC 9.1.3] and 4.3.1(a) [FSC 9.1.4] address awareness of potentially affected sites.</p>	<p><b>Pyz.9</b> Propyzamide is not applied on Sites of Special Scientific Interest, Areas of Special Scientific Interest, ancient woodland sites or priority habitats where rare grasses or sedges may be present.</p> <p>See also control Pyz.9 and the controls for soil, above.</p> <p><i>See also UKWAS 2.2.1(c), 2.2.1(d), 2.2.1(e), 4.1.1(a), 4.2.1(a) and 4.3.1(a) [FSC 7.2.1.3, 7.2.1.4, 7.2.1.5, 9.1.1, 9.1.3 and 9.1.4 respectively].</i></p>

Exposure Elements	Minimum list of values	Description of why/why not a risk	Mitigation strategies defined to minimize risk	Controls
			<p>Damage to HCV 1 and 3 sites is best avoided by not using propyzamide on these sites. In addition, as with protections for surface water, it is important not to apply propyzamide on frozen or waterlogged ground, to avoid the risk of runoff onto adjacent sites.</p> <p>For HCV 4, see the strategies for soil, above.</p>	
	Landscape (aesthetics, cumulative impacts)	Standard forestry usage of propyzamide is <b>not</b> considered to have any significant impacts.	N/A	N/A
	Ecosystem services (water, soil, carbon sequestration, tourism)	<p>As noted previously, there are <b>potential impacts on water and soil</b>.</p> <p>Standard forestry usage of propyzamide is <b>not</b> considered to have any significant impacts on carbon sequestration or tourism.</p>	See the strategies for water and soil, above.	See the controls for water and soil, above.
<b>Social</b>	High Conservation Values (especially HCV 5-6)	<p>As noted previously, there are <b>potential impacts on water supplies (HCV 5)</b>.</p> <p>Standard forestry usage of propyzamide is <b>not</b> considered to have any significant</p>	<p>See the strategies for water, especially in relation to water supplies, above.</p> <p>Appropriate communication and consultation as per UKWAS 2.3.1(a) [FSC 4.1.1] and 2.3.1(c) [FSC 9.4.2] will be important to ensure that neighbours with private water supplies are suitably informed and able to discuss mitigation measures.</p>	<p>See the controls for water, above.</p> <p><i>See also UKWAS 2.3.1(a) and 2.3.1(c) [FSC 4.1.1 and 9.4.2 respectively].</i></p>

Exposure Elements	Minimum list of values	Description of why/why not a risk	Mitigation strategies defined to minimize risk	Controls
		impacts on cultural values (HCV 6).		
	Health (fertility, reproductive health, respiratory health, dermatologic, neurological and gastrointestinal problems, cancer and hormonal imbalance)	Propyzamide is <b>suspected of causing cancer</b> (CLP H351).	<p>Worker safety and welfare are addressed primarily in the PPE and hygiene requirements of FISA202 (paragraphs 2-11), but also throughout the guide, including paragraph 58 regarding the effects of PPE and weather on worker stress.</p> <p>Minimum PPE requirements for application, handling of product concentrate and handling of contaminated surface must be based on the product label, the COSHH assessment and FISA202. Engineering controls may replace personal protective equipment if the COSHH assessment shows they provide an equal or higher standard of protection.</p>	<p><b>Pyz.10</b> Operators have and use adequate personal protective equipment as specified on the product label and in the COSHH assessment.</p> <p><b>Pyz.11</b> Operator exposure to propyzamide is monitored using pesticide application records and site checks of use of personal protective equipment. There is appropriate follow up action if personal protective equipment is not being used.</p> <p><b>Pyz.12</b> Operator health concerns are monitored using pesticide application records and site checks. There is appropriate follow up action if health concerns are identified.</p>
	Welfare	<p>Standard forestry usage of propyzamide <b>may have indirect effects on worker welfare through the weight of spraying gear</b>. The risk of overheating as a result of wearing personal protective equipment is relatively low given the timing of application.</p> <p>In addition, workers must have access to clean water for both washing and drinking.</p>		
	Food and water	<i>Note: This value is taken to refer to wild forest foods (rather than agricultural</i>	See the strategies for water, especially in relation to water supplies, above.	See the controls for water, above.

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		<p><i>crops) and to drinking water.</i></p> <p>As propyzamide is applied in winter, standard forestry usage is <b>not</b> considered to have any significant impacts on food.</p> <p>As noted previously, there are <b>potential impacts on water supplies.</b></p>		
	<p>Social infrastructure; (schools and hospitals, recreational infrastructure, infrastructure adjacent to the management unit)</p>	<p>Standard forestry usage of propyzamide is <b>not</b> considered to have any significant impacts.</p>	<p>N/A</p>	<p>N/A</p>
	<p>Economic viability (agriculture, livestock, tourism)</p>	<p>Propyzamide usage <b>may potentially have impacts on some water-based enterprises (such as fish farming), or on water supplies for enterprises (such as breweries or distilleries), or on adjacent downslope agricultural land if it</b></p>	<p>See the strategies for water, above, including the importance of not applying propyzamide on frozen or waterlogged ground, to avoid the risk of runoff into adjacent surface water, which is also relevant to avoiding runoff onto adjacent agricultural land.</p>	<p>See the controls for water, above.</p>



Exposure Elements	Minimum list of values	Description of why/why not a risk	Mitigation strategies defined to minimize risk	Controls
		is washed off frozen ground.		
	Rights (legal and customary)	<p>Standard forestry usage of propyzamide <b>may lead to actual or perceived restrictions on rights of access.</b></p> <p>Propyzamide usage <b>may potentially have impacts on rights to uncontaminated water.</b></p>	<p>Some restrictions to public access, in line with section 2.3 of FCPG015, are desirable in order to minimise other risks. However, where such restrictions are imposed, they should be kept to the minimum extent and duration necessary to achieve their aims.</p> <p>In addition to actual restrictions on public access, some forest users may feel excluded because of their uncertainties about operations or their concerns about safety. This risk is best mitigated through appropriate stakeholder engagement, as addressed by UKWAS 2.3.1(c) [FSC 7.6.1].</p> <p>See also the strategies for water, above.</p>	<p><b>Pyz.13</b> Where it is desirable to restrict public access to minimise health and safety risks, such restrictions are kept to the minimum extent and duration necessary to achieve their aims.</p> <p>See also the controls for water, above.</p> <p><i>See also UKWAS 2.3.1(c) [FSC 7.6.1] under High Conservation Values, above.</i></p>
	Others	No other risks have been identified.	N/A	N/A