



**2014** Volume III

# Proteção Integrada das Culturas

## Efeitos Secundários dos Produtos Fitofarmacêuticos

**MINISTÉRIO DA AGRICULTURA E DO MAR,  
DIREÇÃO-GERAL DE ALIMENTAÇÃO E VETERINÁRIA**

**PROTEÇÃO INTEGRADA DAS CULTURAS**

(Ao abrigo da alínea b), do art. 3º e do nº 4 do artº 11º do Decreto-Lei nº 37/2013,  
de 13 de março)

**VOLUME III – Efeitos secundários dos produtos fitofarmacêuticos**

**Lisboa**

**2014**

Atualizado a julho de 2014

## INTRODUÇÃO

Os produtos fitofarmacêuticos devem ser objeto de uma utilização adequada, de acordo com a respetiva autorização, tendo em conta os princípios da proteção integrada, conferindo, sempre que possível, prioridade a alternativas não químicas com vista a assegurar um nível elevado de proteção da saúde humana, animal e do ambiente.

De acordo com a Lei nº 26/2013, de 11 de abril, desde 01 de janeiro de 2014, é obrigatória a aplicação dos princípios gerais da proteção integrada por todos os utilizadores profissionais.

Um dos princípios gerais da proteção integrada constantes do anexo II da referida Lei, nomeadamente o 5º princípio prevê que “os produtos fitofarmacêuticos aplicados devem ser tão seletivos quanto possível para o fim em vista e terem o mínimo de efeitos secundários para a saúde humana, os organismos não visados e o ambiente”. A aplicação deste princípio exige o conhecimento da toxicidade para o Homem, para os organismos não visados, entre os quais, os artrópodes auxiliares, e dos efeitos no ambiente dos produtos fitofarmacêuticos autorizados. Impõe-se, portanto, que nesta perspetiva, sejam os utilizadores profissionais informados das características de toxicidade e possíveis efeitos de cada produto fitofarmacêutico autorizado para determinada finalidade para que, respeitando os princípios acima referidos, possa tomar a decisão mais adequada para o problema fitossanitário em causa, relativamente à escolha, de entre todos os meios disponíveis, do produto fitofarmacêutico com menor impacte.

Para esse efeito, apresenta-se neste documento, a informação subjacente à caracterização toxicológica, ecotoxicológica, ambiental e relativa aos artrópodes auxiliares, para permitir ao utilizador profissional a seleção do produto fitofarmacêutico (inseticidas, fungicidas ou herbicidas) dentro do conjunto de produtos fitofarmacêuticos autorizados para uma dada finalidade, o mais adequado, de forma a cumprir com o princípio geral supra referido, de carácter obrigatório desde 1 de janeiro de 2014.

No que diz respeito aos aspetos toxicológicos, ecotoxicológicos e ambientais, a informação apresentada baseia-se na classificação toxicológica e ambiental atribuídas a cada produto, bem como frases de Risco específicas (Frases R) consideradas relevantes para a caracterização do produto. São ainda consideradas, quando pertinente, frases específicas de Segurança previstas no Regulamento de implementação (CE) nº 547/2011, de 08 de junho, relativo à rotulagem de produtos fitofarmacêuticos. Estas frases de Segurança são estabelecidas para categorização do risco/perigo associado aos produtos, o qual tem, inerente, também, o estabelecimento de medidas de mitigação dos riscos identificados, com vista à proteção de outros organismos não visados, nomeadamente aves e outros mamíferos terrestres, abelhas e outros polinizadores, quando da autorização de colocação no mercado desses produtos.

Estando, presentemente, a classificação, embalagem e rotulagem de produtos fitofarmacêuticos a beneficiar de um regime provisório, que permite a transição faseada entre a classificação dos produtos ainda de acordo com os critérios da Diretiva 1999/45/CE<sup>1</sup> e de acordo com os critérios da mais recente legislação relativa à classificação, embalagem e rotulagem de substâncias e misturas, nomeadamente, o Regulamento 1272/2008/CE<sup>2</sup> (Regulamento CLP) podem ainda ser colocados no mercado produtos fitofarmacêuticos rotulados com base nos critérios da Diretiva, até à data de 01 de junho de 2015.

Assim, no que diz respeito à toxicidade para o Homem e para o Ambiente a classificação dos produtos fitofarmacêuticos ainda é apresentada de acordo com os critérios da Diretiva, uma vez que a esmagadora maioria dos produtos fitofarmacêuticos presentemente colocados no mercado ainda se encontram rotulados em conformidade. Posteriormente, a caracterização dos produtos será apresentada em conformidade com os critérios do Regulamento CLP.

---

<sup>1</sup> **Diretiva nº 1999/45/CE do PE e do CONS, de 31 de maio**, relativa à aproximação das disposições legislativas, regulamentares e administrativas dos Estados-membros respeitantes à classificação, embalagem e rotulagem das preparações perigosas;

<sup>2</sup> **Regulamento 1272/2008/CE do PE e do CONS, de 16 de dezembro**, relativo à classificação, rotulagem e embalagem de substâncias e misturas, que altera e revoga as Diretivas 67/548/CEE e 1999/45/CE, e altera o Regulamento (CE) nº 1907/2006 (Reg. REACH) de 18 de dezembro;

Para avaliar os efeitos secundários nas espécies não visadas, em particular, artrópodes auxiliares, a regulamentação comunitária exige a apresentação de ensaios de efeitos secundários para espécies de artrópodes auxiliares padrão. Estes devem ser efetuados de forma sequencial com início em ensaios laboratoriais, seguidos de ensaios de laboratório alargado, semi-campo e ensaios de campo. Estes ensaios permitem avaliar os efeitos letais nos artrópodes auxiliares, em particular na mortalidade dos mesmos e efeitos sub-letais, com particular relevo na capacidade de predação, parasitismo, fecundidade, capacidade de regeneração, entre outros.

A atribuição da classificação relativa à toxicidade das substâncias ativas sobre auxiliares (outros artrópodes auxiliares não visados para além das abelhas) tem como base a as orientações da OILB, sendo com as categorias "tóxico a muito tóxico", "moderadamente tóxico" e "neutro a pouco tóxico".

Esta publicação será sujeita a revisão periódica de modo a conter informação actualizada relativa à autorização dos produtos fitofarmacêuticos colocados no mercado ou à sua retirada.











flonicamida/nicotinoide	---	---	---	---	---	---	○	○	○	---	○	○	
TEPPEKI	---	---	▲	---	---	---	---	---	---	---	---	---	
formetanato (hidrocloroeto)/carbamato	---	---	---	---	---	---	●	---	●	●	●	●	
DICARZOL	T	N	---	R50/53	▲	---	---	---	---	---	---	---	
fosmete/organofosforado	---	---	---	---	---	---	●	○	○	○	○	○	
IMIDAN 50 WP	Xn	N	▲	R50/53	▲	---	---	---	---	---	---	---	
hexitiazox/tiazolidinona	---	---	---	---	---	---	○	○	○	○	○	○	
DIABLO	---	N	---	R51/53	---	---	---	---	---	---	---	---	
NISSORUN	---	N	---	R51/53	---	---	---	---	---	---	---	---	
TENOR	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	
imidaclopride/neonicotinóide	---	---	---	---	---	---	○	○	○	○	●	○	
APLIK 200 SL	---	N	▲	---	▲	---	---	---	---	---	---	---	
CONDOR	---	N	▲	---	▲	---	---	---	---	---	---	---	
CONFIDOR CLASSIC	---	N	▲	---	▲	---	---	---	---	---	---	---	
CONFIDOR O-TEQ	Xi	N	▲	---	▲	---	---	---	---	---	---	---	
CORSÁRIO	---	N	▲	---	▲	---	---	---	---	---	---	---	
COURAZE	---	N	▲	---	▲	---	---	---	---	---	---	---	
COURAZE WG	Xn	N	▲	---	▲	---	---	---	---	---	---	---	
GAUCHO	Xn	N	▲	R52/53	▲	---	---	---	---	---	---	---	
KOHINHOR 20 SL	---	N	▲	---	▲	---	---	---	---	---	---	---	
MASTIM	---	N	▲	---	▲	---	---	---	---	---	---	---	
NEOMAX	---	N	▲	---	▲	---	---	---	---	---	---	---	
NUPRID 200 SC	---	N	▲	---	▲	---	---	---	---	---	---	---	
NUPRID 200 SL	---	N	▲	---	▲	---	---	---	---	---	---	---	
PLURAL 200 SL	---	N	▲	---	▲	---	---	---	---	---	---	---	
PRITT	---	N	▲	---	▲	---	---	---	---	---	---	---	
WARRANT 200 SL	---	N	▲	---	▲	---	---	---	---	---	---	---	
imidaclopride + lambda-cialotrina /neonicotinóide + piretroide	---	---	---	---	---	---	●	●	○	●	●	●	
FORTIS COMBI	Xn	N	▲	R50/53	---	---	---	---	---	---	---	---	
JUDO COMBI	Xn	N	▲	R50/53	---	---	---	---	---	---	---	---	
indoxacarbe/oxadiazinas	---	---	---	---	---	---	○	○	○	○	○	○	
AVAUNT	Xn	N	▲	R51/53	---	---	---	---	---	---	---	---	
EXPLICIT WG	Xn	N	▲	R51/53	---	---	---	---	---	---	---	---	
STEWART	Xn	N	▲	R51/53	---	---	---	---	---	---	---	---	
lambda-cialotrina/piretroide	---	---	---	---	---	---	●	●	○	●	●	●	



OLEOFIX	---	---	---	---	---	---	---	---	---	---	---	---	---
POMOROL	---	---	---	---	---	---	---	---	---	---	---	---	---
SOLEOL	---	---	---	---	---	---	---	---	---	---	---	---	---
TOLFIN	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
VEROL	---	---	---	---	---	---	---	---	---	---	---	---	---
oxamil/oxima-carbamato	---	---	---	---	---	---	⊙	---	⊙	●	●	●	---
VYDATE 10 L	T	N	---	R50/53	▲	▲	---	---	---	---	---	---	---
pimetrozina/azometino	---	---	---	---	---	---	⊙	---	⊙	○	○	⊙	---
PLENUM 50 WG	---	N	---	R52/53	---	---	---	---	---	---	---	---	---
piridabena/piridazinona	---	---	---	---	---	---	○	○	○	⊙	○	⊙	---
NEXTER 20	Xn	N	▲	R50/53	---	---	---	---	---	---	---	---	---
pirimicarbe/carbamato	---	---	---	---	---	---	⊙	●	○	○	⊙	⊙	---
PIRIMOR G	T	N	---	R50/53	---	---	---	---	---	---	---	---	---
pirifos-metilo/organofosforado	---	---	---	---	---	---	●	---	●	●	●	●	---
ACTELLIC 50	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
piriproxifena/derivado de piridina	---	---	---	---	---	---	●	---	○	○	⊙	●	---
ADMIRAL 10 EC	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
BAIKAL 501	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
BLADE	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
spirodiclofena/cetoenol	---	---	---	---	---	---	⊙	○	○	⊙	○	⊙	---
ENVIDOR	Xn	N	▲	R51/53	---	---	---	---	---	---	---	---	---
spinosade/spinosinal	---	---	---	---	---	---	○	○	○	⊙	⊙	⊙	---
SPINTOR	---	N	▲	R50/53	---	---	---	---	---	---	---	---	---
SPINTOR ISCO	---	---	---	---	---	---	---	---	---	---	---	---	---
SUCCESS	---	N	▲	R50/53	---	---	---	---	---	---	---	---	---
tau-fluvalinato/piretróide	---	---	---	---	---	---	●	---	○	●	●	●	---
KLARTAN	---	N	---	R50/53	---	---	---	---	---	---	---	---	---
MAVRIK (APV 3693)	---	N	---	R50/53	---	---	---	---	---	---	---	---	---
MAVRIK (APV 3792)	---	N	---	R50/53	---	---	---	---	---	---	---	---	---
tebufenpirade/pirazol	---	---	---	---	---	---	●	○	⊙	●	○	⊙	---
MASAI	Xn	N	▲	R50/53	---	---	---	---	---	---	---	---	---
tebufenozida/diacilhidrazina	---	---	---	---	---	---	○	○	○	○	○	○	---
MIMIC	---	---	---	R52	---	---	---	---	---	---	---	---	---
teflutrina/piretóide	---	---	---	---	---	---	○	---	---	---	---	---	---
FORCE	Xn	---	---	R52	---	---	---	---	---	---	---	---	---
tiaclopride/neonicotinóide	---	---	---	---	---	---	●	⊙	●	●	⊙	⊙	---



## EFEITOS SECUNDÁRIOS DOS PRODUTOS FITOFARMACÊUTICOS-GRUPO FUNGICIDAS

Substância activa / Família química	Homem	Ambiente	Abelhas	Organismos aquáticos	Aves	Fauna selvagem	Auxiliares						Observações	
							cocc.	sirf.	crisop.	antoc.	himen.	fitoseid		
<b>2-fenilfenol + imazalil (sulfato)</b> / fenol + imidazol (DMI) (tratamento pós-colheita)	---	---	---	---	---	---	---	---	---	---	---	---	---	
CITROCIL (uso em armazém)	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---	
<b>ametoctradina</b> /pirimidilaminas (Qxl)	---	---	---	---	---	---	---	---	○	---	○	○	---	
INITIUM	Is	---	---	---	---	---	---	---	---	---	---	---	---	
<b>ametoctradina + dimetomorfe</b> / pirimidilamina (Qxl) + morfollnas (CAA)	---	---	---	---	---	---	---	---	---	---	○	○	---	
ORVEGO	Xn	---	---	R52/53	---	---	---	---	---	---	---	---	---	
<b>ametoctradina + metirame</b> / pirimidilaminas (Qxl) + ditiocarbamato	---	---	---	---	---	---	---	---	○	○	○	⊙	---	
ENERVIN	---	N	---	R51/53	---	---	---	---	---	---	---	---	---	
<b>azoxistrobina</b> / metoxiacrilato (Qol)	---	---	---	---	---	---	○	---	○	○	○	○	---	
AZBANY	---	N	---	R50/53	---	---	---	---	---	---	---	---	---	
MIRADOR (APV 0446)	---	N	---	R50/53	---	---	---	---	---	---	---	---	---	
MIRADOR (017/2012*)	---	N	---	R50/53	---	---	---	---	---	---	---	---	---	
ORTIVA	---	N	---	R50/53	---	---	---	---	---	---	---	---	---	
QUADRIS	---	N	---	R50/53	---	---	---	---	---	---	---	---	---	
TAZER	---	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>azoxistrobina + clortalonil</b> / metoxiacrilato (Qol) + derivado ftálico	---	---	---	---	---	---	○	---	---	○	○	⊙	---	
AMISTAR OPTI	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
ORTIVA OPTI	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>azoxistrobina + difenoconazol</b> / metoxiacrilato (Qol) + azol (DMI)	---	---	---	---	---	---	○	---	○	⊙	○	○	---	
ORTIVA TOP	Xi	N	---	---	---	---	---	---	---	---	---	---	---	
<b>azoxistrobina + folpete</b> / metoxiacrilato (Qol) + ftalimida	---	---	---	---	---	---	⊙	---	○	○	○	○	---	

QUADRIS MAX	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
SIENA	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
azoxistrobina + tebuconazol/ metoxiacrilato (QoI) + azol (DMI)	---	---	---	---	---	---	○	---	○	⊙	⊙	○	---
ARIANNE	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
<i>Bacillus subtilis</i> QST 713 / bactéria	---	---	---	---	---	---	○	---	⊙	---	⊙	⊙	---
SERENADE MAX	Is	---	---	---	---	---	---	---	---	---	---	---	---
benalaxil + mancozebe / acilalanina (fenilamida) + ditiocarbamato	---	---	---	---	---	---	○	○	○	○	⊙	⊙	---
GALBEN M	Xi	N	---	---	---	---	---	---	---	---	---	---	---
TRECATOL M	Xi	N	---	---	---	---	---	---	---	---	---	---	---
benalaxil-M + mancozebe / acilalanina (fenilamida) + ditiocarbamato	---	---	---	---	---	---	○	○	○	○	⊙	⊙	---
FANTIC M	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
CAPRI M	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
STADIO M	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
SIDECAR M	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
benalaxil-M + folpete / acilalanina (fenilamida) + ftalimida	---	---	---	---	---	---	⊙	⊙	○	○	○	○	---
FANTIC F	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
CAPRI F	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
SIDECAR F	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
STADIO F	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
benalaxil + folpete / acilalanina (fenilamida) + ftalimida	---	---	---	---	---	---	⊙	⊙	○	○	○	○	---
GALBEN F	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
TRECATOL F	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
TAIREL F LÍQUIDO	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
beniavalicarbe (na forma de éster isopropílico) + cobre (sulfato tribásico) / amida do ácido carboxílico (CAA) + inorgânico	---	---	---	---	---	---	○	○	⊙	○	○	○	---
VINTAGE DISPERS	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
beniavalicarbe (na forma de éster isopropílico) + mancozebe / amida do ácido carboxílico (CAA) + ditiocarbamato	---	---	---	---	---	---	○	○	○	○	⊙	⊙	---































<b>mancozebe + metalaxil-M /</b> ditiocarbamato + fenilamida	---	---	---	---	---	---	---	---	---	---	---	⊙	⊙	
RIDOMIL GOLD MZ PÉPITE	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
MILDISAN MZ *	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---	
SIMPLIA MZ WP	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
PLAY MZ WP	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
ROXAM MZ WP	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
RIDOMIL GOLD MZ 68 WP	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
EPERON MZ WP	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>mancozebe + metalaxil /</b> ditiocarbamato + fenilamida	---	---	---	---	---	---	---	---	---	---	---	⊙	⊙	
CRUZADO MZ	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---	
EKYP MZ	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---	
ARMETIL M	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---	
SABRE M	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>mancozebe + tebuconazol /</b> ditiocarbamato + triazol (DMI)	---	---	---	---	---	---	○	⊙	○	⊙	⊙	⊙	⊙	
FOX MZ	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
TEBUTOP MZ	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>mancozebe + valifenalato /</b> ditiocarbamato + amida do ácido carboxílico (CAA)	---	---	---	---	---	---	---	---	---	---	---	○	⊙	
VALIS M	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>mancozebe + zoxamida /</b> ditiocarbamato + benzamida	---	---	---	---	---	---	---	---	---	---	---	⊙	⊙	
ADERIO	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>mandipropamida / mandelamida (CAA)</b>	---	---	---	---	---	---	○	---	---	---	---	○	○	
REVUS	---	N	---	R51/53	---	---	---	---	---	---	---	---	---	
<b>mepanipirime / anilinoimidina</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	
FRUPICA	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>mepildinocape / dinitrofenóis</b>	---	---	---	---	---	---	⊙	---	---	○	○	○	○	
KARATHANE STAR	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
ENVICTRO *	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
DIKAR PLUS *	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
AGRIKAR MAX *	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---	
<b>metalaxil-M / fenilamida</b>	---	---	---	---	---	---	---	---	---	---	---	○	○	
RIDOMIL GOLD SL	Xn	N	---	R52/53	---	---	---	---	---	---	---	---	---	
<b>metconazol / azol (DMI)</b>	---	---	---	---	---	---	---	---	---	---	---	○	○	

SUNORG PRO	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
metirame / ditiocarbamato	---	---	---	---	---	---	---	●	○	⊙	⊙	⊙	---
POLYRAM DF	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
metirame + piraclostrobina / ditiocarbamato + metoxi-carbamato (QoI)	---	---	---	---	---	---	---	●	○	⊙	⊙	⊙	---
CABRIO TOP	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
metrafenona / benzofenona	---	---	---	---	---	---	---	---	⊙	---	○	○	---
VIVANDO	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
miclobutanil / azol (DMI)	---	---	---	---	---	---	○	---	○	---	○	○	---
FONGYS PRONTO	Is	---	---	---	---	---	---	---	---	---	---	---	---
RALLY	Xn	N	---	R52/53	---	---	---	---	---	---	---	---	---
FONGYS	Is	---	---	---	---	---	---	---	---	---	---	---	---
SELECTANE	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	---
SYSTHANE 45 EW	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	---
miclobutanil + quinoxifena / azol (DMI) + quinolina	---	---	---	---	---	---	---	---	---	---	○	○	---
ARITHANE	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
pencicurão / fenilureia	---	---	---	---	---	---	---	---	---	---	---	---	---
MONCEREN	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
penconazol / azol (DMI)	---	---	---	---	---	---	○	○	○	○	○	○	---
TOPAZE	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
DOURO	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
PENCOL	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
picoxistrobina / metoxiacrilato (QoI)	---	---	---	---	---	---	⊙	---	⊙	---	●	⊙	---
ACANTO	---	N	---	R50/53	---	---	---	---	---	---	---	---	---
piraclostrobina / metoxi-carbamato (QoI)	---	---	---	---	---	---	○	---	○	---	○	○	---
CABRIO	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
COMET 200	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
pirimetanil / anilinoimidina	---	---	---	---	---	---	○	---	○	⊙	⊙/●	○	---
SCALA	Is	---	---	R52/53	---	---	---	---	---	---	---	---	---
GLO TANIL 40 *	Is	---	---	R52/53	---	---	---	---	---	---	---	---	---
PYRUS 400 SC	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
procloraz / azol (DMI)	---	---	---	---	---	---	○	---	○	---	●	●	---
SPORTAK 45	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	---
propamocarbe (hidrocloro) / carbamato	---	---	---	---	---	---	---	---	○	---	○	○	---











BONANZA	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	
bispirace-sódio/ pirimidiniloxibenzóico	---	---	---	---	---	---	---	---	○	○	○	○	
NOMINEE	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	
bromoxinil/ hidroxibenzonitrilo	---	---	---	---	---	---	○	○	○	○	⊙	○	
BROMOQUISA	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	
BROMOTRIL 250 SC	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	
BUCTRIL	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
EMBLEM	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
EMBLEM FLO	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
MEXTROL B	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
SPACTACTUS	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
bromoxinil+prosulfurão/ hidroxibenzonitrilo+ sulfonilureia							---	---	---	○	●	---	
ECLAT 63 WG	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
bromoxinil+terbutilazina/ hidroxibenzonitrilo+ 1,3,5-triazina	---	---	---	---	---	---	○	○	○	○	⊙	---	
ARPIX TER	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
carfentrazone-etilo/ triazolinona	---	---	---	---	---	---	---	---	---	○	○	---	
SHARK	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	
SPOTLIGHT PLUS	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	
cihalofop-butilo/ arilofenoxipropionato	---	---	---	---	---	---	○	---	○	○	○	○	
CLINCHER	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	
CLINCHER PLUS	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	
cicloxidime/ ciclohexadiona oxima	---	---	---	---	---	---	---	○	○	○	○	○	
FOCUS ULTRA	Xi	---	---	R52/53	---	---	---	---	---	---	---	---	
clodinafope-propagilo/ ariloxifenoxipropiónico	---	---	---	---	---	---	---	---	○	---	---	---	
BROCAR	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
clodinafope+diflufenção+ cloquintocete-mexilo/ ariloxifenoxipropiónico+ piridinocarboxamida+quinolina (protetor de fitotoxicidade)	---	---	---	---	---	---	---	---	---	○	○	---	

RAVENAS PLUS	Xn	N	---	R50/53	---	---	---	---	---	○	○	---	
clomazona+metribuzina/ isoxazolidinona+1,2,4-triazinona	---	---	---	---	---	---	---	---	---	⊙	●	---	
METRIC	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
clomazona+linurão/ isoxazolidinona+ureia	---	---	---	---	---	---	---	---	---	○	○	---	
LINGO	T	N	---	R50/53	---	---	---	---	---	---	---	---	
clopiralde/ ácido piridinocarboxílico	---	---	---	---	---	---	○	○	○	○	○	○	
CLIOPHAR 100 SL	---	---	---	---	---	---	---	---	---	---	---	---	
LONTREL 100	---	---	---	---	---	---	---	---	---	---	---	---	
LONTREL 72 SG	---	---	---	---	---	---	---	---	---	---	---	---	
clopiralde+MCPA/ ácido piridinocarboxílico+ácido ariloxialcanóico	---	---	---	---	---	---	---	---	○	○	○	○	
CHARDEX	Xn	---	---	R52/53	---	---	---	---	---	---	---	---	
cloridazão/ piridazinona	---	---	---	---	---	---	---	---	---	○	○	---	
BETOZON 65	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	
clortolurão/ ureia	---	---	---	---	---	---	○	○	○	○	○	---	
DUQUE	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
HERBIPEC 500 FL	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
LENTIPUR 500 FL	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
TOLUMAR	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
TOLUREX 50 SC	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
clortolurão+diflufenção/ ureia+piridinocarboxamida	---	---	---	---	---	---	---	---	---	○	○	---	
AGILITY	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
KILAT	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
LEGACY PLUS	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
TRIGONIL	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
TRINCO	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	
desmedifame+etofumesato+fenemedi fame/ bis- carbamato+alcanossulfonato de benzofuranilo+bis-carbamato	---	---	---	---	---	---	○	○	○	⊙	---	○	
BETANAL EXPERT	---	N	---	R51/53	---	---	---	---	---	---	---	---	
dicamba/ ácido benzóico	---	---	---	---	---	---	○	○	○	○	⊙	---	







ACCELERATOR 45	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
ARBONAL STAR 45	---	---	---	---	---	---	---	---	---	---	---	---	---
ASTERÓIDE	---	---	---	---	---	---	---	---	---	---	---	---	---
BARBARIAN XTRA 450	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
BARBARIAN SUPER 360	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
BARBARIAN XL	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
BUGGY	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
CLINIC ACE	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
CLINIC PRONTO	---	---	---	R52/53	---	---	---	---	---	---	---	---	---
CATAMARAN	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
COSMIC	---	---	---	R52/53	---	---	---	---	---	---	---	---	---
ENVISION 45	---	---	---	---	---	---	---	---	---	---	---	---	---
FITOGLIFO	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
GLIFOCHEM	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
GLIFOS	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
GLIFOS ACCELERATOR	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
GLIFOSATO SAPEC	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
GLIFOSATO SELECTIS	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
GLIFOPEC	Xi	---	---	R52/53	---	---	---	---	---	---	---	---	---
GLIFOTOP ULTRA	---	---	---	R52/53	---	---	---	---	---	---	---	---	---
GLOSATO	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
GLYPHOGAN	---	---	---	R52/53	---	---	---	---	---	---	---	---	---
KARDA	---	---	---	R52/53	---	---	---	---	---	---	---	---	---
MONTANA	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
MARQUI	Xi	---	---	R52/53	---	---	---	---	---	---	---	---	---
MARQUI II	Xi	---	---	R52/53	---	---	---	---	---	---	---	---	---
NUFOSATE	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
OXALIS	---	---	---	R52/53	---	---	---	---	---	---	---	---	---
PITON VERDE	---	---	---	---	---	---	---	---	---	---	---	---	---
PREMIER	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
PREMIER 45 ENVISION	---	---	---	---	---	---	---	---	---	---	---	---	---
RADIKAL	---	---	---	---	---	---	---	---	---	---	---	---	---
RAUDO	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
RONAGRO	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
RONTRAT	-	N	---	R51/53	---	---	---	---	---	---	---	---	---
ROUNDUP	Xi	N	---	R51/53	-	-	---	---	---	---	---	---	---





KUMASI	---	---	---	R52/53	---	---	---	---	---	---	---	---	---
LASER PLUS	---	---	---	R52/53	---	---	---	---	---	---	---	---	---
glifosato+piraflofena-etilo/ derivado de glicina+3-fenil-pirazol	---	---	---	---	---	---	○	---	○	●	●	○	---
HALCON	---	N	R50/53	R50/53	---	---	---	---	---	---	---	---	---
glufosinato-amônio/ ácido aminofosfínico	---	---	---	---	---	---	---	●	⊙	●	●	●	---
BASTA S	Xn	---	---	R52/53	---	---	---	---	---	---	---	---	---
iodosulfurão-metilo+mesosulfurão-metilo+mefenepir-dietilo/ sulfonilureias+pirazolina (safener)	Xi	N	---	R50/53	---	---	○	---	○	○	○	---	---
ATLANTIS	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
iodosulfurão-metilo-SÓDIO+mefenepir-dietilo/ sulfonilureia+pirazolina (safener)	---	---	---	---	---	---	○	○	○	○	○	○	---
HUSSAR	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
imazamox/ imidazolinona	---	---	---	---	---	---	---	---	---	○	○	---	---
PULSAR 40	---	N	---	R50/53	---	---	---	---	---	---	---	---	---
ioxinil (octanoato)/ hidroxibenzonitrilo	---	---	---	---	---	---	○	○	---	⊙	●	---	---
TOTRIL	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
isoproturão/ ureia	---	---	---	---	---	---	○	○	○	○	○	---	---
ARELON	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
MARCUS	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
HERBOR	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
ISOPEC	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
PROTUGAN 50 SC	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
isoxabena/ amida	---	---	---	---	---	---	○	---	---	⊙	○	○	---
CENT-7	---	N	---	R51/53	---	---	---	---	---	---	---	---	---
FLEXIDOR	Xi	N	---	R51/53	---	---	---	---	---	○	○	---	---
isoxaflutole+tiencarbazona+ ciprosumfida/ isoxazol+ sulfonil-amino-carbonil-triazolinona+ safener	---	---	---	---	---	---	---	---	---	○	○	---	---
ADENGO	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
lenacil/ uracilo	---	---	---	---	---	---	---	○	○	○	○	---	---







ACTIVUS WG	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
ACTIVUS MAXX	---	N	---	R50/53	---	---	---	---	---	---	---	---	---
ORDAGO	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
PODIUM	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
XISTO 330	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
STOMP 33 E	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
STOMP AQUA	-	N	---	R50/53	---	---	---	---	---	---	---	---	---
TRAMPLE	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
<b>penoxsulame/ triazolopirimidina</b>	---	---	---	---	---	---	---	---	---	○	○	---	---
VIPER	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
<b>pinoxadene+cloquintocete-mexilo/ fenilpirazolinás+quinolina (safener)</b>	---	---	---	---	---	---	---	---	---	○	○	---	---
AXIAL	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
<b>piridato/ fenil-piridazina</b>	---	---	---	---	---	---	○	⊙	---	○	○	---	---
LENTAGRAN 45 WP	Xi	N	---	R51/53	---	---	---	---	---	---	---	---	---
<b>profoxidime/ ciclohexanodiona oxima</b>	---	---	---	---	---	---	---	○	○	○	⊙	---	---
AURA	C	N	---	R51/53	---	---	---	---	---	---	---	---	---
<b>propaquizafope/ ariloxifenoxipropionato</b>	---	---	---	---	---	---	○	○	○	○	○	---	---
AGIL	T	N	---	R50/53	---	---	---	---	---	---	---	---	---
AGIL 100 EC	T	N	---	R50/53	---	---	---	---	---	---	---	---	---
<b>propizamida/ amida</b>	---	---	---	---	---	---	○	○	---	○	○	⊙	---
INDIANA	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	---
KERB FLO	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
KERB 50 W	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	---
MIG 40 SC	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	---
PROPYZAMIDE SELECTIS 40 SC	Xn	N	---	R51/53	---	---	---	---	---	---	---	---	---
<b>prosulfocarbe/ tiocarbamato</b>	---	---	---	---	---	---	○	○	⊙	⊙	●	○	---
BOXER	Xi	N	---	R50/53	---	---	---	---	---	---	---	---	---
<b>prosulfurão/ sulfonilureia</b>	---	---	---	---	---	---	⊙	○	---	○	○	---	---
PEAK	Xn	N	---	R50/53	---	---	---	---	---	---	---	---	---
<b>quizalofope-P-etilo/ ariloxifenoxipropionato</b>	---	---	---	---	---	---	---	○	⊙	---	●	---	---










**Legenda aplicável a todas as folhas:**

**1. Toxicidade para o Homem**

Xn	Nocivo
Xi	Irritante
isento	---
T	Tóxico
T <sup>+</sup>	Muito tóxico
N	Perigoso para o ambiente
não classificado	---

**2. Toxicidade para os auxiliares**

	Tóxico a muito tóxico
	Medianamente tóxico
	Neutro a pouco tóxico
---	Ausência de dados

**3. Risco para o ambiente e organismos não visados**

R50	Muito tóxico para organismos aquáticos
R51	Tóxico para organismos aquáticos
R52	Nocivo para organismos aquáticos
R53	Podendo causar efeitos nefastos a longo prazo no ambiente aquático.
não classificado	----



Perigoso para abelhas/aves/fauna selvagem



Muito perigosos para abelhas

**4. Outros**

\* - autorização de importação paralela

\*\* - esgotamento de existências

**Direção Geral de Alimentação e Veterinária**  
Direção de Serviços de Meios de Defesa Sanitária

Largo da Academia Nacional de Belas Artes  
1249-105 Lisboa

Geral 213 239 500  
[www.dgav.pt](http://www.dgav.pt)

