

**February 2023**

**Agrochemicals accepted by the British  
Beer and Pub Association and  
Campden BRI for use on Cereals**

**BBPA Technical Circular No. 483**

**Agrochemicals accepted by the BBPA (British Beer and Pub Association) and Campden BRI for use on cereals  
for malting and brewing**

## The purpose of the BBPA/Campden BRI List

Campden BRI and BBPA aim to test agrochemicals which, because of their chemical nature or timing of application to barley could potentially either affect the malting, brewing or fermentation processes, or cause undesirable off-flavours in the finished beer. In the EU, Commission Regulation (EU) No 284/2013 (Annex, Point 6.4.3 and 6.4.4), and the retained version of this Regulation in the UK, requires quality testing of individual crops and on transformation processes to be undertaken, including taint testing where relevant, meaning an evaluation of the possible adverse effects on transformation processes, such as brewing and malting, or on the quality of their products, is required.

For an agrochemical in a plant protection product (“product”) approved for use on barley to be included on the list of accepted agrochemicals, Campden BRI will carry out an initial assessment of factors, including chemical nature, mode of action, time of application and available test data. Following this initial assessment, Campden BRI will conduct any additional malting or brewing trials necessary to come to a decision. These further trials do not replace or duplicate the toxicological or efficacy testing required by the HSE’s Chemicals Regulation Division (CRD) before the product can be registered but are designed to test the suitability of treated crops for processing specifically within the malting and brewing industry.

Responsibility for approval of agrochemicals in England, Scotland and Wales (GB) lies with the CRD, as do authorisations for products containing those agrochemicals in GB and Northern Ireland (NI). Only those agrochemicals approved by the European Commission may be used in NI. The CRD may therefore authorise products for use in GB only, GB and NI, or NI only, depending on where the agrochemicals are approved. This document is issued in the UK by the BBPA as a Technical Circular and is a comprehensive list of agrochemicals contained in products **registered in GB** for use on barley. Users outside GB will need to check whether listed agrochemicals are approved for use in their own countries. **Agrochemicals are withdrawn from the main list if they are no longer found in products registered for use on barley in GB, even though they do not cause problems in terms of processing. Previously accepted agrochemicals that remain approved in GB but for which there are no registered products for use on barley appear in the annex to the list.**

Please note that kieselguhr (diatomaceous earth) is not present on the list as it is not within the scope of chemicals subject to CRD registration, and its use remains accepted.

Listed agrochemicals are classed as ACCEPTED for use on malting barley for brewing. Agrochemicals accepted for barley are also accepted for wheat for malting and brewing, provided that they are registered for that use by the CRD. Note that a few pesticides registered for use on wheat are not registered for barley; these have not been evaluated for potential effects in malting or brewing and are therefore not included in this list. Product names are now no longer listed in this document, due to the changing nature of products on the market. Full product listings are available on the CRD website: <https://secure.pesticides.gov.uk/pestreg/ProdSearch.asp>

Limitations on timing of application apply for some agrochemicals: where these differ from label instructions or the approval notice there is a note in the limitations column. Details of barley growth stages can be accessed on the AHDB website: <https://cereals.ahdb.org.uk/media/180128/g49-cereals-growth-stages-a-guide-for-crop-treatments.pdf>

**Maximum Residue Levels (MRLs).** A MRL is the maximum concentration of a pesticide residue (expressed as mg/kg), permitted in or on food commodities and animal feeds. The HSE now sets MRLs applicable to GB. MRLs for both GB and the EU (also applicable in NI) appear in the list as well as those that have been set by Codex. MRLs are primarily a check that Good Agricultural Practice is being followed and are intended to assist international trade in produce treated with pesticides. MRLs are **not** safety limits. MRLs are established using toxicological and dietary exposure evidence concerning the safety to humans of the resulting residues and this means that MRLs represent residue levels which are toxicologically acceptable. They are generally well below safety limits, thus exposure to residues in excess of an MRL does not automatically imply a hazard to health. The list has been extended to the extent that chemicals accepted for barley are also accepted for use on wheat or other cereals for malting and or brewing. However, this should not be taken to imply that there is a current registration for that chemical on that cereal. The MRLs given are for barley.

The EU and GB (active substance) expiry date is the date on which approval for the chemical, on any crop, will be withdrawn unless an extension is granted.

EU expiry dates and MRLs are updated from the EU Pesticides Database at: <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/active-substances>

UK expiry dates are updated from the GB approvals register which can be downloaded from: <https://www.hse.gov.uk/pesticides/pesticides-registration/uk-active-substances-register.htm>.

UK MRLs are updates from the GB MRL register at: <https://secure.pesticides.gov.uk/mrls/search>

The latest expiry date is the latest date on which GB approval for any product for use on barley will expire. Note that some products, may have earlier expiry dates. Some products may be co-formulations with other pesticides. Full details of approved products, together with amendment and withdrawal notices issued since this list was last modified, are available at: <https://secure.pesticides.gov.uk/pestreg/ProdSearch.asp>

## Changes made to the list since July 2022

Type	Active Ingredient	Changes
-	-	Reference to "UK" MRLs and approval periods amended to "GB" to more accurately reflect regulatory status
Fungicide	Trifloxystrobin	Limitations removed
Insecticide (for admixture with grain or in empty grain stores and for pre-harvest (field) use)	Cypermethrin	Note added regarding its status as a candidate for substitution in the EU but not in GB.
Fungicide	Cyproconazole	Although authorisation remains in GB (but not in the EU), there are no longer any authorised products in GB
-	-	Substances that retain their approval in GB but for which no products are registered for use on barley have been moved to the annex
Insecticides for admixture with grain or in empty grain stores	Pyrethrins	Moved to the annex
Insecticides and fungicides for seed treatment only	Carboxin, Flutriafol, Prochloraz, Tefluthrin	Moved to the annex
Insecticides for pre-harvest (field) use	Pirimicarb	Moved to the annex
Fungicides	Acibenzolar-S-methyl, Cyproconazole, Flutriafol, Kresoxim-methyl, Prochloraz	Moved to the annex
Herbicides	2,4-DB	Moved to the annex
Miscellaneous	Metaldehyde (slug bait)	Moved to the annex

Only additions, withdrawals, and changes of status or limitations are noted here. Changes to expiry dates and MRLs are not included in this table.

Changes to the list since the last date are highlighted in **yellow**. Any proposed or upcoming withdrawals are indicated in *italics*.

Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
<b>Insecticides for admixture with grain or in empty grain stores</b>									
Aluminium phosphide	Accepted	Grain storage only	31/08/2023	31/08/2025	28/02/2026		0.05	0.05	-
Cypermethrin	Accepted		31/01/2029	31/10/2024	30/04/2027 (GB only) 30/04/2025 (GB and NI)	Cypermethrin is listed in the EU as a candidate for substitution. It is not listed as a candidate for substitution in GB.	2	2	2
Deltamethrin (with piperonyl butoxide)	Accepted	Grain admixture and empty stores	31/10/2023	31/10/2024	30/04/2027		2	2	2 (deltamethrin) 30 (piperonyl butoxide)
Magnesium phosphide	Accepted	Grain storage only	31/08/2023	31/08/2025	28/02/2026		-	0.05	-
Pirimiphos-methyl	Accepted	Grain admixture	31/07/2023	31/07/2024	31/01/2025		5	5	7
Pirimiphos-methyl	Accepted	Empty stores & transport only	31/07/2023	31/07/2024	31/01/2026		5	5	7

Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
<b>Insecticides and fungicides for seed treatment only (note that some field chemicals are also approved as seed treatments)</b>									
Fludioxonil	Accepted	Seed treatment only	31/10/2023	31/10/2024	30/04/2026		0.01*	0.01*	0.05*
Fluopyram	Accepted	Seed treatment only	31/01/2024	31/01/2024	31/07/2026		0.2	0.2	0.2
Fluxapyroxad	Accepted	Seed treatment only	31/05/2025	31/05/2025	30/11/2027		2	3	2
Imazalil	Accepted	Seed treatment only	31/12/2024	31/12/2024	31/05/2027		0.01* <sup>3</sup>	0.01*	0.01*
Ipconazole	Accepted	Seed treatment only	30/11/2024	30/11/2024	31/05/2027		0.01*	0.01*	-
Prothioconazole	Accepted		31/07/2023	31/07/2024	31/01/2026		0.2	0.2	0.2
Sedaxane	Accepted	For use as a co-formulation with fludioxinil only.	31/05/2025	31/05/2025	30/04/2026		0.01*	0.01*	0.01*
Silthiofam	Accepted	Seed treatment only	30/06/2033	30/06/2033	None set	Extensions of authorisations applied for in the UK, no regulatory decision taken. Authorisation remains until decision taken.	0.01*	0.01*	-
Tebuconazole	Accepted		31/08/2023	31/08/2024	28/02/2026		2	2	2
Triticonazole	Accepted	Seed treatment only	30/04/2023	30/04/2024	31/10/2024		0.01*	0.01*	-

<sup>1</sup> carboxin plus its metabolites carboxin sulfoxide and oxycarboxin (carboxin sulfone), expressed as carboxin.

<sup>2</sup> carboxin

<sup>3</sup> Imazalil (any ratio of constituent isomers)

Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
<b>Insecticides for pre-harvest (field) use</b>									
Alpha-cypermethrin	Accepted		Not approved	31/10/2026	30/04/2029 (GB only)	Approval withdrawn by Commission Implementing Regulation (EU) 2021/795 of 17 May 2021. Member States to withdraw authorisations for PPPs by 07/12/2021. Any grace period to expire by 07/12/2022.  HSE proposes to withdraw approval. Draft decision available <a href="#">here</a>	2**	2**	2
Cypermethrin	Accepted		31/01/2029	31/10/2024	30/04/2027 (GB only) 30/04/2025 (GB and NI)	Cypermethrin is listed in the EU as a candidate for substitution. It is not listed as a candidate for substitution in GB.	2**	2**	2
Deltamethrin	Accepted		31/10/2023	31/10/2024	30/04/2027		2	2	2
Esfenvalerate	Accepted		31/12/2023	31/12/2025	30/06/2025		0.3 <sup>1</sup>	0.3 <sup>1</sup>	-
Lambda - cyhalothrin	Accepted		31/03/2023	31/03/2026	30/09/2025		0.5	0.5	0.5
Tau-fluvalinate	Accepted		31/08/2024	31/08/2024	31/12/2024		0.5	0.4**	-

<sup>1</sup> Fenvalerate - any ratio of isomers including esfenvalerate

Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
<b>Fungicides</b>									
Azoxystrobin	Accepted		31/12/2024	31/12/2024	30/06/2027		1.5	1.5	1.5
Benzovindiflupyr	Accepted		02/03/2023	02/03/2026	30/09/2025 (NI Only) 02/09/2025 (GB and NI)		1.5	1.5	1
Bixafen	Accepted		31/05/2025	31/05/2025	30/11/2027		0.5	0.4	0.4
Boscalid	Accepted	BEFORE ear emergence only	31/07/2023	31/07/2024	31/01/2026		4	4	0.5
Cyflufenamid	Accepted		31/03/2023	31/03/2026	30/09/2025		0.1	0.1	-
Cyprodinil	Accepted		30/04/2023	30/04/2024	31/10/2026 (GB only) 31/10/2025 (GB and NI)		4**	4**	3
Fluopyram	Accepted	For foliar treatment up to GS61	31/01/2024	31/01/2024	31/07/2026		0.2	0.2	0.2
Fluoxastrobin	Accepted		31/07/2023	31/07/2024	31/01/2026		0.5	0.5	-
Fluxapyroxad	Accepted	Up to GS 45 only (max. dose, 62.5g a.i./ha)	31/05/2025	31/05/2025	30/11/2027		2	3	2
Folpet	Accepted		31/07/2023	31/07/2024	31/01/2026		1	2	-
Isopyrazam	Accepted		Not approved	31/03/2026	30/09/2028 (GB only)		0.6	0.6	0.6



Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
<b>Fungicides</b>									
Mefentrifluconazole	Accepted		20/03/2029	20/03/2029	20/09/2031		0.6	0.6	-
Metconazole	Accepted	Mixtures with epoxiconazole BEFORE ear emergence only	30/04/2023	30/04/2024	31/10/2025		0.4	0.4	-
Metrafenone	Accepted	BEFORE ear emergence only	30/04/2023	30/04/2024	31/10/2025		0.6	0.6	0.5
Penthiopyrad	Accepted		31/05/2025	31/05/2025	30/11/2027		0.3	0.3	0.2
Proquinazid	Accepted		31/07/2023	31/07/2025	31/01/2026		0.02*	0.04	-
Prothioconazole	Accepted		31/07/2023	31/07/2024	31/01/2027 (GB only) 31/01/2026 (GB and NI)		0.2	0.2	0.2
Pyraclostrobin	Accepted	BEFORE ear emergence only	31/01/2023	31/01/2024	31/07/2025		1	1	1
Spiroxamine	Accepted		31/12/2023	31/12/2026	31/01/2026		0.05**	0.05**	-
Sulphur	Accepted		31/12/2023	31/12/2024	30/06/2026		No MRL required	No MRL required	-
Tebuconazole	Accepted		31/08/2023	31/08/2024	28/02/2026		2	2	2
Trifloxystrobin	Accepted		31/07/2033	31/07/2033	31/01/2036 (NI only) 30/06/2024 (GB and NI)		0.5	0.5	0.5

Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL	EU MRL	Codex MRL
<b>Growth Regulators</b>									
2-chloroethylphosphonic acid (ethephon)	Accepted		31/07/2023	31/07/2024	31/01/2026		1	1	1.5
Chlormequat	Accepted		30/11/2023	30/11/2024	31/05/2026		7	7	2
Mepiquat	Accepted		28/02/2023	28/02/2024	31/08/2025		4	4	-
Prohexadione calcium	Accepted		31/12/2023	31/12/2025	30/06/2026		0.1	0.1	-
Trinexapac-ethyl	Accepted		30/04/2023	30/04/2024	31/10/2025		3	3	3

Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
<b>Herbicides</b>									
2,4-D	Accepted		31/12/2030	31/12/2030	30/09/2023		0.05*	0.05 *	-
Amidosulfuron	Accepted		31/12/2023	31/12/2024	30/06/2026		0.01*	0.01 *	-
Aminopyralid	Accepted		31/12/2024	31/12/2024	30/06/2027		0.15	0.15	0.1
Bifenox	Accepted		31/12/2023	31/12/2024	31/12/2024		0.02	0.02	-
Carfentrazone-ethyl	Accepted		31/07/2033	31/07/2033	31/07/2025		0.05*	0.05 *	-
Chlorotoluron	Accepted		31/10/2023	31/10/2024	None set	Extensions of authorisations applied for in the UK, no regulatory decision taken. Authorisation remains until decision taken. Approval period extended for 1 year as assessment has been delayed.	0.1	0.1	-
Clopyralid	Accepted		30/09/2036	30/04/2024	31/06/2027		2	2	-
Dicamba	Accepted		31/12/2023	31/12/2024	31/07/2025		7	7	7
Dichlorprop-P	Accepted		30/04/2023	30/04/2024	31/07/2025		0.1	0.1	-
Diflufenican	Accepted		31/12/2023	31/12/2024	30/06/2026		0.02	0.02	-
Fenoxaprop-P	Accepted		31/12/2023	31/12/2024	30/06/2026		0.1	0.1	-
Florasulam	Accepted		31/12/2030	31/12/2030	30/06/2033		0.01*	0.01 *	-
Flufenacet	Accepted		31/10/2023	31/10/2024	30/04/2026		0.1	0.1	-
Fluroxypyr	Accepted		31/12/2024	31/12/2024	30/06/2027		0.1	0.1	-
Glyphosate	Accepted	Including pre-harvest/desiccant use	15/12/2023	15/12/2025	30/06/2024		20	20 <sup>1</sup> 10 <sup>2</sup>	30

Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
<b>Herbicides</b>									
Halauxifen-methyl	Accepted		05/08/2025	05/08/2025	05/02/2028		0.02 *	0.02 *	-
Iodosulfuron-methyl	Accepted		31/03/2032	31/03/2032	None set	Extensions of authorisations applied for in the UK, no regulatory decision taken. Authorisation remains until decision taken.	0.01 *	0.01 *	-
Isoxaben	Accepted		31/08/2024	31/08/2024	28/02/2027		0.1	0.1	-
MCPA	Accepted		31/10/2023	31/10/2024	30/04/2026		0.2 <sup>3</sup>	0.2 <sup>3</sup>	0.2
Mecoprop-P	Accepted		31/01/2023	31/01/2024	31/07/2025		0.05 *	0.05 *	-
Metsulfuron-methyl	Accepted		31/03/2023	31/03/2026	30/09/2025		0.01 *	0.01 *	-
Pendimethalin	Accepted		30/11/2024	30/11/2024	30/04/2026		0.05 *	0.05 *	-
Picolinafen	Accepted		30/06/2031	30/06/2031	None set	Extensions of authorisations applied for in the UK, no regulatory decision taken. Authorisation remains until decision taken.	0.05*	0.05 *	-
Pinoxaden	Accepted		30/06/2026	30/06/2026	31/12/2028	EU MRL to apply from 22/02/2023	1	0.7 <sup>4</sup>	0.7
Prosulfocarb	Accepted		31/10/2023	31/10/2024	30/04/2026		0.01 *	0.01 *	-
Thifensulfuron-methyl	Accepted		31/10/2031	31/10/2031	30/09/2025		0.01 *	0.01 *	-
Tri-allate	Accepted		31/12/2023	31/12/2024	30/06/2026		0.1 *	0.1 *	-
Tribenuron-methyl	Accepted		30/01/2034	30/01/2034	30/07/2036		0.01 *	0.01 *	-

<sup>1</sup> Glyphosate

<sup>2</sup> trimethyl-sulphonium cation

<sup>3</sup> sum of both MCPA and MCPB)

<sup>4</sup> sum of M4 and M6

Active	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
<b>Miscellaneous</b>									
Ferric phosphate	Accepted		31/12/2030	31/12/2030	30/06/2033		No MRL required	No MRL required	-

**Endnotes:**

\* Denotes MRL set at limit of determination

\*\* Sum of isomers

CRD product expiry date may refer to a co-formulation with other pesticides

## Annex:

### Substances which retain GB authorisation but for which there are currently no registered products for use on barley

Insecticides and fungicides for seed treatment only (note that some field chemicals are also approved as seed treatments)									
Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
Pyrethrins	Accepted	Grain stores only	31/08/2023	31/08/2025	No product approved for barley		3	3	0.3

Insecticides and fungicides for seed treatment only (note that some field chemicals are also approved as seed treatments)									
Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
Carboxin	Accepted	Seed treatment only	Not approved	31/05/2024	No approved products in the UK.		0.03* <sup>1</sup> 0.01* <sup>2</sup>	0.03*	-
Flutriafol	Accepted	Seed treatment only	Not approved	31/08/2024	No products approved for barley	EU approval expired on 31/05/2021. Authorisation for products previously authorised in the UK have been extended for GB only, but not for barley.	0.15	0.15	-
Prochloraz	Accepted		Not approved	31/12/2026	No products approved for barley	EU approval expired on 31 December 2021. Authorisation for products previously authorised for use in UK have been extended for GB use only.	0.03*	0.03*	2
Tefluthrin	Accepted	Seed treatment only	31/12/2024	31/12/2024	no products approved for barley		0.05	0.02**	-

Insecticides for pre-harvest (field) use									
Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
Pirimicarb	Accepted		30/04/2023	30/04/2024	No products approved for use on barley		0.05	0.05	0.05

Fungicides									
Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
Acibenzolar-S-methyl	Accepted		31/03/2031	31/03/2031	No authorised products listed	Not evaluated but safely used over a number of years	0.05	0.05	-
Cyproconazole	Accepted		Not approved	31/05/2024	No authorised products listed	Authorisation in EU expired on 31/05/2021 as no application to renew was received	0.2	0.2	0.08
Flutriafol	Accepted		Not approved	31/08/2024	No products approved for use on barley	EU approval expired on 31/05/2021.	0.15	0.15	-
Kresoxim-methyl	Accepted	Mixtures with epoxiconazole BEFORE ear emergence only	31/12/2024	31/12/2024	None approved for use on barley		0.15	0.15	0.15

Fungicides									
Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
Prochloraz	Accepted		Not approved	31/12/2026	None currently approved for use on barley	EU approval expired on 31 December 2021  Uses for certain cereals other than barley have been extended for GB only	0.03*	0.03*	2

Herbicides									
Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
2,4-DB	Accepted		31/10/2032	31/10/2032	No authorised products listed		0.05*	0.05	-

Miscellaneous									
Active Substance	Status	Limitations	Expiry (EU) (Active Substance)	Expiry (GB) (Active Substance)	Latest Product expiry (CRD)	Comments	GB MRL (mg/kg)	EU MRL (mg/kg)	Codex MRL (mg/kg)
Metaldehyde (slug bait)	Accepted		31/05/2023	31/05/2026	No products authorised	Outdoor use of metaldehyde was phased out on 31 March 2022 in the UK.	0.05 *	0.05 *	-