

BBPA Technical Circular No. 477

July 2018

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

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, Council Directive 93/71/EEC (Annex III) requires the effects of pesticides on transformation processes to be taken into account and requires an evaluation of the possible adverse effects on transformation processes, such as brewing and malting, or on the quality of their products.

For a chemical 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 Chemicals Regulation Directorate (CRD) before the chemical can be registered, but are designed to test the suitability of treated crops for processing specifically within the malting and brewing industry.

This document is issued in the UK by the BBPA as a Technical Circular and is a comprehensive list of active ingredients **registered in the UK** for barley. Users outside the UK will need to check whether listed chemicals are approved for use in their own countries. **Products are withdrawn from the list if they are no longer registered in the UK by the CRD, even though they do not cause problems in terms of processing.**

Listed agrochemicals are classed as ACCEPTED for use on malting barley for brewing, NOT ACCEPTED or NOT TESTED OR ACCEPTED. 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). These are as given in EU legislation. A MRL is the maximum concentration of a pesticide residue (expressed as mg/kg), permitted in or on food commodities and animal feeds. 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.

For more details concerning the chemicals listed contact:

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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 expiry date is the date on which approval for the chemical, on any crop, will be withdrawn unless an extension is granted. Approval in the UK for named products containing the chemical is granted by the CRD. The latest expiry date is the latest date on which UK approval for any product for use on barley will expire. Note that some products, including the listed product, 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>

MRLs are updated from the EU MRL harmonised database, released Sept 2008:

<http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=homepage&language=EN>

Changes made to the list since October 2017

Type	Active Ingredient	Changes
Seed treatment, fungicide	Fluquinconazole	Removed: expiration of UK authorisation
Seed treatment	Triticonazole	Removed: expiration of UK authorisation
Insecticide	Pirimicarb	Removed: expiration of UK authorisation
Fungicide	Famoxadone	Removed: expiration of UK authorisation
Fungicide	Fenpropidin	Removed: expiration of UK authorisation
Growth regulator	Imazaquin	Removed: expiration of UK authorisation
Herbicide	Aminopyralid	Added to the List
Herbicide	Diclofop-methyl	Removed: expiration of UK authorisation

Fungicide	Picoxystrobin	Note of withdrawal of EU authorisation
Herbicide	Flupyrsulfuron-methyl	Note of withdrawal of EU authorisation
Insecticide (grain storage)	Kieselguhr	Removed from list as usage in the UK falls outside plant protection product legislation

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	Status	Limitations	Expiry (EU)	Latest product expiry (CRD)	Comments	EU MRL	Codex MRL
Insecticides for admixture with grain or in empty grain stores							
Aluminium phosphide	Accepted	Grain storage only	31/08/2022	28/02/2025		0.05	0.1
Chlorpyrifos-methyl	Accepted	Grain storage only: store for 90 days before malting	31/01/2019	31/07/2020		3	-
Cypermethrin	Accepted		31/10/2018	30/04/2021		2	2
Deltamethrin (with piperonyl butoxide)	Accepted	Grain admixture and empty stores	31/10/2018	30/04/2021		2	2 (delt) 30 (pip)
Magnesium phosphide	Accepted	Grain storage only	31/08/2022	28/02/2025		0.05	0.1
Pirimiphos-methyl	Accepted	Grain admixture	31/07/2019	31/12/2021		5	7
Pirimiphos-methyl	Accepted	Empty stores & transport only	31/07/2019	31/12/2021		5	7
Pyrethrins	Accepted	Grain stores only	31/08/2022	28/02/2023	Pest control product approved by HSE	3	0.3

Active	Status	Limitations	Expiry (EU)	Latest product expiry (CRD)	Comments	EU MRL	Codex MRL
Insecticides and fungicides for seed treatment only (note that some field chemicals are also approved as seed treatments)							
Carboxin	Accepted	Seed treatment only	31/05/2021	31/12/2021		0.01 *	-
<i>Clothianidin</i>	<i>Accepted</i>	<i>Seed treatment only</i>	31/01/2019	31/07/2020	Only uses in permanent greenhouses, where the plant must remain for its entire life cycle, are permitted. Authorisations must be amended by 19/09/2018, grace period ends 19/12/2018	0.04	0.04
Fludioxonil	Accepted	Seed treatment only	31/10/2018	31/12/2021		0.01 *	0.05
Fluopyram	Accepted	Seed treatment only	31/01/2024	31/01/2021		0.2	-
Flutriafol	Accepted	Seed treatment only	31/05/2021	31/12/2021		0.15	-
Imazalil	Accepted	Seed treatment only	31/12/2021	30/06/2024		0.05 *	-
Ipconazole	Accepted	Seed treatment only	31/08/2024	28/02/2027		0.01 *	-
Prochloraz	Accepted		31/12/2021	31/12/2021		1	2
Prothioconazole	Accepted		31/07/2019	31/01/2021		0.2	0.2
Silthiofam	Accepted	Seed treatment only	30/06/2033	30/04/2021		0.01 *	-
Tebuconazole	Accepted		31/08/2019	28/02/2022		2	2
Tefluthrin	Accepted	Seed treatment only	31/12/2021	31/12/2021		0.05	-
Thiram	Accepted		30/04/2019	31/12/2021		0.1 * (as thiram)	1 total DTC

Active	Status	Limitations	Expiry (EU)	Latest product expiry (CRD)	Comments	EU MRL	Codex MRL
Insecticides for pre-harvest (field) use							
Alpha-cypermethrin	Accepted		31/07/2019	31/01/2021		2 ¹	2
Cypermethrin	Accepted		31/10/2018	30/04/2021		2 ¹	2
Deltamethrin	Accepted		31/10/2018	30/04/2021		2	2
Esfenvalerate	Accepted		31/12/2022	31/08/2019		Any ratio of isomers, 0.3	2
Lambda - cyhalothrin	Accepted		31/03/2023	24/02/2019		0.5	0.5
Pirimicarb	Accepted		30/04/2019	No approval	No authorisations in the UK for barley. Previous authorisations expired on 31/07/2017.	0.05	0.05
Tau-fluvalinate	Accepted		31/05/2021	31/12/2021		0.5	-
Zetacypermethrin	Accepted		30/11/2021	31/12/2021		2	2

Active	Status	Limitations	Expiry (EU)	Latest product expiry (CRD)	Comments	EU MRL	Codex MRL
Fungicides							
Acibenzolar-S-methyl	Accepted		31/03/2031	31/12/2018	Not evaluated but safely used over a number of years	0.05 *	-
Azoxystrobin	Accepted		31/12/2021	30/06/2024		1.5	1.5
Benzovindiflupyr	Accepted		02/03/2023	31/05/2023		1.5	-
Bixafen	Accepted		30/09/2023	31/03/2026		0.5	-
Boscalid	Accepted	BEFORE ear emergence only	31/07/2019	31/01/2021		4	0.5
Chlorothalonil	Accepted		31/10/2018	31/12/2021		0.4	-
Cyflufenamid	Accepted		31/03/2023	30/09/2022		0.1	-
Cyproconazole	Accepted		31/05/2021	31/12/2021		0.2	0.08
Cyprodinil	Accepted		30/04/2019	31/10/2021		4	3
Epoxiconazole	Accepted	BEFORE ear emergence only	30/04/2019	31/12/2021		1.5	-
Fenpropimorph	Accepted		30/04/2019	31/12/2021		0.4	0.5
Fluoxastrobin	Accepted		31/07/2019	31/01/2021		0.5	-
Flutriafol	Accepted		31/05/2021	31/12/2021		0.15	-
Fluxapyroxad	Accepted	Up to GS 45 only (max. dose, 62.5g a.i./ha)	31/12/2022	30/06/2025		2	2
Folpet	Accepted		31/07/2019	31/01/2021		1	-
Isopyrazam	Accepted		31/03/2023	30/09/2025		0.6	0.07

Kresoxim-methyl	Accepted	Mixtures with epoxiconazole BEFORE ear emergence only	31/12/2021	31/12/2021		0.1	0.1
Metconazole	Accepted	Mixtures with epoxiconazole BEFORE ear emergence only	30/04/2019	31/10/2021		0.4	-
Metrafenone	Accepted	BEFORE ear emergence only	30/04/2019	31/12/2021		0.6	0.5
Penthiopyrad	Accepted		30/04/2024	31/10/2026		0.3	0.2
<i>Picoxystrobin</i>	<i>Accepted</i>		<i>Withdrawn</i>	<i>30/11/2018</i>	<i>Authorisation non-renewed by Commission Implementing Regulation (EU) 2017/1455. Authorisation withdrawn by 30 November 2017 at the latest, with any grace period shall expire by 30 November 2018.</i>	<i>0.3</i>	<i>-</i>
Prochloraz	Accepted		31/12/2021	31/12/2021		1	2
Propiconazole	Accepted		31/01/2019	31/12/2021		2	2
Proquinazid	Accepted		31/07/2022	31/01/2023		0.02 *	-
Prothioconazole	Accepted		31/07/2019	31/12/2021		0.2	0.2
Pyraclostrobin	Accepted	BEFORE ear emergence only	31/01/2019	31/12/2021		1	1
Quinoxifen	Accepted	BEFORE ear emergence only	30/04/2019	31/10/2020		0.2	0.01 *
Spiroxamine	Accepted		31/12/2021	31/01/2021		0.05	-
Sulphur	Accepted		30/12/2020	31/12/2021		No limit	-
Tebuconazole	Accepted		31/08/2019	28/02/2022		2	2
Trifloxystrobin	Accepted		31/07/2018	31/01/2021		0.5	0.5

Active	Status	Limitations	Expiry (EU)	Latest product expiry (CRD)	Comments	EU MRL	Codex MRL
Growth Regulators							
2-chloroethylphosphonic acid (ethephon)	Accepted		31/07/2019	31/01/2021		1	1.5
Chlormequat	Accepted		30/11/2021	31/05/2024		3	2
Mepiquat	Accepted		28/02/2019	31/08/2021		4	-
Prohexadione calcium	Accepted		31/12/2021	31/08/2021		0.1	-
Trinexapac-ethyl	Accepted		30/04/2019	31/10/2020		3	3

Active	Status	Limitations	Expiry (EU)	Latest product expiry (CRD)	Comments	EU MRL	Codex MRL
Desiccants							
Glyphosate ³	Accepted		15/12/2022	30/06/2020		20 (glyphosate) 10 (trimethyl-sulphonium cation)	30

Active	Status	Limitations	Expiry (EU)	Latest product expiry (CRD)	Comments	EU MRL	Codex MRL
Herbicides							
2,4-D	Accepted		31/12/2030	30/04/2020		0.05 *	-
2,4-DB	Accepted		31/10/2032	30/04/2020		0.05 *	-
Amidosulfuron	Accepted		31/12/2018	30/06/2021		0.01 *	-
Aminopyralid	Accepted		31/12/2024	04/10/2021		0.1	0.1
Bifenox	Accepted		31/12/2018	31/12/2021		0.02	-
Bromoxynil	Accepted		31/07/2019	31/01/2021		0.05 *	-
Carfentrazone-ethyl	Accepted		31/07/2018	31/07/2021		0.05 *	-
Chlorotoluron	Accepted		31/10/2018	31/01/2021		0.1	-
Clopyralid	Accepted		30/04/2019	30/04/2021		2	-
Dicamba	Accepted		31/12/2018	30/04/2021		7	7
Dichlorprop-P	Accepted		30/04/2019	30/04/2021		0.1	-
Diflufenican	Accepted		31/12/2018	30/06/2021		0.02	-
Fenoxaprop-P	Accepted		31/12/2018	30/06/2021		0.1	-

Florasulam	Accepted		31/12/2030	30/06/2033		0.01 *	-
Flufenacet	Accepted		31/10/2018	30/04/2021		0.1	-
Flupyr-sulfuron-methyl	Accepted		Withdrawn	13/12/2018	Authorisation non-renewed by Commission Implementing Regulation (EU) 2017/1496. Authorisations withdrawn by 13 December 2017 at the latest, with any grace period to expire by 13 December 2018.	0.02 *	-
Fluroxypyr	Accepted		31/12/2021	30/06/2024		0.1	-
Flurtamone	Accepted		31/10/2018	30/04/2021		0.01 *	-
Glyphosate ³	Accepted		15/12/2022	30/06/2020		20 (glyphosate) 10 (trimethyl-sulphonium cation)	30
Halauxifen-methyl	Accepted		05/08/2025	05/02/2028		0.02 *	-
Iodosulfuron-methyl	Accepted		31/03/2032	30/04/2020		0.01 *	-
Isoxaben	Accepted		31/05/2021	30/11/2023		0.1	-
MCPA	Accepted		31/10/2018	30/04/2021		0.2 (for sum of both)	-
Mecoprop-P	Accepted		31/01/2019	31/07/2021		0.05 *	-
Metsulfuron-methyl	Accepted		31/03/2023	30/09/2025		0.01 *	-
Pendimethalin	Accepted		31/08/2024	31/01/2021		0.05 *	-
Picolinafen	Accepted		30/06/2031	31/12/2019		0.05 *	-
Pinoxaden	Accepted		30/06/2026	31/10/2019		1	-
Prosulfocarb	Accepted		31/10/2018	30/04/2021		0.01 *	-
Thifensulfuron-methyl	Accepted		31/10/2031	31/12/2018		0.01 *	-
Tri-allate	Accepted		31/12/2021	30/06/2022		0.1 *	-
Tribenuron-methyl	Accepted		31/10/2018	30/04/2021		0.01 *	-

Active	Status	Limitations	Expiry (EU)	Latest product expiry (CRD)	Comments	EU MRL	Codex MRL
Miscellaneous							
Ferric phosphate	Accepted		31/12/2030	30/06/2033		No MRL required	-
Metaldehyde (slug bait)	Accepted		31/05/2021	31/12/2021		0.05 *	-

Footnotes:

* Denotes MRL set at limit of determination

¹ Sum of isomers

² Sum of bisdithiocarbamates expressed as CS₂

³ Including glyphosate trimethylsulphonium salts

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